

D V M R V A A F T S L L Q I S V S A
I W W G Y P P S R R C F S S S R C P R
S G G D T R R R V D V S A P D V R V

3' CCT AGG TGG TAG GCA TGC CGC CGC TTG CAG CTG TCT TCG ACC TAG CTG TGC CTG
9 18 27 36 45 54
5' GGA TCC ACC ATC CGT ACG GCG GCG AAC GTC GAC AGA AGC TGG ATC GAC ACG GAC

G S T I R T A A N V D R S W I D T D
D P P S V R R R T S T E A G S T R T
I H H P Y G G E R R Q K L D R H G R

R A N N L S R R P P R G T V T T L S
A R T T * R G G R R G G P S P P * R
R A R Q E A V A E A A E R H R H D V

CGC GCG CGC AAC AAG TCG CTG GCG GAG CCG CCG GAG GGC CAC TGC CAC CAG TTG
63 72 81 90 99 108
GCG CGC GCG TTG TTC AGC GAC CGC CTC GGC GGC CTC CCG GTG ACG GTG GTC AAC

A R A L F S D R L G G L P V T V V N
R A R C S A T A S A A S R * R W S T
A R V V Q R P P R R P P G D G G Q R

A S A A P T A S I C K P A P R S R R
R P R P R R R R S A S R R P G R G G
V R V R G A D G L H V E A R A A V A

CTG CGC CTG CGC CGG CCG CAG CGG CTC TAC GTG AAG CCG CGC CCG GCG CTG GCG
117 126 135 144 153 162
GAC GCG GAC GCG GCC GGC GTC GCC GAG ATG CAC TTC GGC GCG GGC CGC GAC CGC

D A D A A G V A E M H F G A G R D R
T R T R P A S P R C T S A R A A T A
R G R G R R R R D A L R R G P R P P

P V T I R R V R P V P M P L A S N M
P C R S G G * G R C P C R C R A T *
P A G H D E E G E A R A D A A R Q E

GCC CCG TGG CAC TAG GAG GAG TGG GAG CCG TGC CCG TAG CCG TCG CGC GAC AAG
171 180 189 198 207 216
CGG GGC ACC GTG ATC CTC CTC ACC CTC GGC ACG GGC ATC GGC AGC GCG CTG TTC

R G T V I L L T L G T G I G S A L F
G A P * S S S P S A R A S A A R C S
G H R D P P H P R H G H R Q R A V H

S P A R T G L V S S P W R S S W P W
R R R G P G W C P A P G G R V G H G
D V A G Q D G V R L Q A V E F E M A

TAG CTG CCG CGG GAC CAG GGG TTG TGC CTC GAC CCG GTG GAG CTT GAG GTA CCG

225 234 243 252 261 270
 ATC GAC GGC GCC CTG GTC CCC AAC ACG GAG CTG GGC CAC CTC GAA CTC CAT GGC

 I D G A L V P N T E L G H L E L H G
 S T A P W S P T R S W A T S N S M A
 R R R P G P Q H G A G P P R T P W P
 S A S F R A E L L A L S S S S S L Q
 H R R S A R R W C P W P P R P A S S
 M V G L L A G G A L G P L V L L Q A

 GTA CTG CGG CTC TTC GCG CGG AGG TCG TTC CGG TCC CTC CTG CTC CTC GAC TCG
 279 288 297 306 315 324
 CAT GAC GCC GAG AAG CGC GCC TCC AGC AAG GCC AGG GAG GAC GAG GAG CTG AGC

 H D A E K R A S S K A R E D E E L S
 M T P R S A P P A R P G R T R S * A
 * R R E A R L Q Q G Q G G R G A E L
 S C Q A R R T W F Y R A W T S I S N
 P A S P G G R G S T G R G H R S A T
 P L V P G A A D L L V E G M D L H Q

 ACC CTC GTG ACC CGG GCG GCG CAG GTC TTC ATG GAG CGG GTA CAG CTC TAC GAC
 333 342 351 360 369 378
 TGG GAG CAC TGG GCC CGC CGC GTC CAG AAG TAC CTC GCC CAT GTC GAG ATG CTG

 W E H W A R R V Q K Y L A H V E M L
 G S T G P A A S R S T S P M S R C C
 G A L G P P R P E V P R P C R D A V
 E G S S N M M P P P T L R L D W L N
 R G P A T * * R R R R P S G C T G C T
 E G R L Q E D D A A P H A A L G V L

 AAG AGG GGC CTC GAC AAG TAG TAG CCG CCG CCC CAC TCG GCG TTC AGG GTG TTC
 387 396 405 414 423 432
 TTC TCC CCG GAG CTG TTC ATC ATC GGC GGC GGG GTG AGC CGC AAG TCC CAC AAG

 F S P E L F I I G G V S R K S H K
 S P R S C S S S A A G * A A S P T S
 L P G A V H H R R R G E P Q V P Q V
 R C R M S P M L A S I T G A W S C F
 G A G * R P C * P P S R G P G A A S
 E Q V E D L A D L R L D D R G L Q L

 AAG GAC GTG GAG TAG CTC CCG TAG TTC CGC CTC TAG CAG GGC CGG GTC GAC GTC
 441 450 459 468 477 486
 TTC CTG CAC CTC ATC GAG GGC ATC AAG GCG GAG ATC GTC CCG GCC CAG CTG CAG

 F L H L I E G I K A E I V P A Q L Q
 S C T S S R A S R R R S S R P S C R
 P A P H R G H Q G G D R P G P A A E
 L A P I T P A A I R A A S F S P * A
 C R R S R R P P S A P P P S P R S P

V V G P D D P R R H P R R L L V A L
 TTG TTG CGG CCC TAG CAG CCC CGC CGC TAC GCC CGC CGC CTC TTC CTG CCG ATC
 495 504 513 522 531 540
 AAC AAC GCC GGG ATC GTC GGG GCG GCG ATG CGG GCG GCG GAG AAG GAC GGC TAG

N N A G I V G A A M R A A E K D G *
 T T P G S S G R R C G R R R R T A R
 Q R R D R R G G D A G G G E G R L G

G R R R P S G S S L A Q R R D G P G
 G A V G P H D L R C P R A A A T V Q V
 G R S A P T I W V V P G P P P * R S

CGG GGC GCT GCG GCC CCA CTA GGT CTG CTG TCC CGG ACC GCC GCC AGT GGA CCT
 549 558 567 576 585 594
 GCC CCG CGA CGC CGG GGT GAT CCA GAC GAC AGG GCC TGG CGG CGG TCA CCT GGA

A P R R R G D P D D R A W R R S P G
 P R D A G V I Q T T G P G G G H L D
 P A T P G * S R R Q G L A A V T W T

A A P R P G A P W C G S R G H P * S
 P P P G R G Q P G A A P D E T R D R
 R R R A A A R R A L L R I K R A T V

GGC CGC CGC CCG GCG CCG GGA CGC CCG GTC GTC GGC CTA GAA GGC ACG CCA GTG
 603 612 621 630 639 648
 CCG GCG GCG GGC CGC GGC CCT GCG GGC CAG CAG CCG GAT CTT CCG TGC GGT CAC

P A A G R G P A G Q Q P D L P C G H
 R R R A A A L R A S S R I F R A V T
 G G G P R P C G P A A G S S V R S R

S V P S * R G E T C G G P R P P S P
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 I L G A I L T G G Y L W G A Q T A L

CTA CTC TGG CCG CTA GTC GCA GGG AGG CAT GTC GGT GGG CCG GAC CCA CCG CTC
 657 666 675 684 693 702
 GAT GAG ACC GGC GAT CAG CGT CCC TCC GTA CAG CCA CCC GGC CTG GGT GGC GAG

D E T G D Q R P S V Q P P G L G G E
 M R P A I S V P P Y S H P A W V A R
 * D R R S A S L R T A T R P G W R G

P S S G W * T D A S G G A A T P W R
 R H L A G D P T R R D G R R Q R G G
 A T F L G M L H G G I G G S D A V

CCG CCA CTT CTC GGG GTA GTC CAC AGG CGG CTA GGG GGG CGG CGA CAG CCG GTG
 711 720 729 738 747 756
 GGC GGT GAA GAG CCC CAT CAG GTG TCC GCC GAT CCC CCC GCC GCT GTC GGC CAC

G G E E P H Q V S A D P P A A V G H
 A V K S P I R C P P I P P P P R L S A T
 R * R A P S G V R R S P R R C R P P

C W G W P S P S R Y W W R R P R W T
 A G A G R R L R D T G G G A R D G P
 P V L G V A F A I P V V V P A T A L

 GCC GTG GTC GGG GTG CCG CTT CCG CTA GCC ATG GTG GTG GCC GCG CCA GCG GTC
 765 774 783 792 801 810
 CGG CAC CAG CCC CAC GGC GAA GGC GAT CGG TAC CAC CAC CGG CGC GGT CGC CAG

 R H Q P H G E G D R Y H H R R G R Q
 G T S P T A K A I G T T T G A V A R
 A P A P R R R R S V P P P A R S P G

 A G A C G C R R * S A C P C S C C A
 R G Q A G V G G D P R V R A P V A R
 D G R R V W V A T L V C V P L F L V

 CAG CGG GGA CGC GTG GGT GTG GCG GCA GTC CTG CGT GTG CCC GTC CTT GTC GTG
 819 828 837 846 855 864
 GTC GCC CCT GCG CAC CCA CAC CGC CGT CAG GAC GCA CAC GGG CAG GAA CAG CAC

 V A P A H P H R R Q D A H G Q E Q H
 S P L R T H T A V R T H T G R N S T
 R P C A P T P P S G R T R A G T A R

 T C R S R R G S C C R T S T A S C S
 Q V A H A V V R V A A L R P L R A P
 S Y L T L S S G F L L S D L Y G L L

 CGA CAT GTC GCA CTC GCT GCT GGG CTT GTC GTC GCT CAG CTC CAT CGG CTC GTC
 873 882 891 900 909 918
 GCT GTA CAG CGT GAG CGA CGA CCC GAA CAG CAG CGA GTC GAG GTA GCC GAG CAG

 A V Q R E R R P E Q Q R V E V A E Q
 L Y S V S D D P N S S E S R * P S R
 C T A * A T T R T A A S R G S R A G

 C * P A A S C A A A W G P * G P T P
 A D R R R L V P R R G A R D A P P Q
 L M V A G C F L G G G L G T L R P N

 CTC GTA GTG CCG CGG CGT CTT GTC CGG CGG CGG GTC GGG CCA GTC GGC CCC CAA
 927 936 945 954 963 972
 GAG CAT CAC GGC GCC GCA GAA CAG GCC GCC CAG CCC GGT CAG CCG GGG GTT

 E H H G A A E Q A A A Q P G Q P G V
 S I T A P Q N R P P P S P V S R G L
 A S R R R T G R R P A R S A G G W

 F G A C P R P R P R G P A G Y R R
 S V P A P G P G R P A A R P A T G G
 P F R R L A Q A A P P P G P R R V A

 CCC TTT GGC CGC GTC CCG GAC CCG GCG CCC CCC GCC GGG CCC CGC GGC ATG GCG
 981 990 999 1008 1017 1026
 GGG AAA CCG GCG CAG GGC CTG GGC CGC GGG GGG CGG CCC GGG GCG CCG TAC CGC

G K P A Q G L G R G G R P G A P Y R
 G N R R R A W A A G G G P G R R T A
 E T G A G P G P R G A A R G A V P P

 P R R P R V P R V L A A S P S P G P
 R A V P G C P G Y W P P A P P R A P
 A P S P A A R A T G P R R Q P V P R

 GCG CCC GCT GCC CCG GCG TGC CCG GCA TGG TCC CGC CGC GAC CCC CTG CCC GGC
 1035 1044 1053 1062 1071 1080
 CGC GGG CGA CGG GGC CGC ACG GGC CGT ACC ACC AGG GCG GCG CTG GGG GAC GGG CCG

 R G R R G R T G R T R A A L G D G P
 A G D G A A R A V P G R R W G T G R
 R A T G P H G P Y Q G G A G G R A G

 P A P P G P R S P P G P P G P P G A
 H L P R A P V A P R A Q L V P R A L
 T S R A P R S P Q A P R S S R A P W

 CCA CCT CGC CCG CCC GGC CCT GCC GAC CGC CCC GGA CCT CCT GGC CCG CCC GGT
 1089 1098 1107 1116 1125 1134
 GGT GGA GCG GGC GGG CCG GGA CGG CTG GGC GGG CCT GGA GGA CCG GGC GGG CCA

 G G A G G P G R L G G P G G P G G P
 V E R A G R D G W A G L E D R A G Q
 W S G R A G T A G R A W R T G R A S

 T G A R V A G A A R S V A T A A R R
 R G P G S R E R R A R F R R R R A G
 G D R G P G S G G R A F G G D G R A

 CGG CAG GGC CGG GCC TGG CGA GGG CGG CGC GCG CTT TGG CGG CAG CGG CGC GCG
 1143 1152 1161 1170 1179 1188
 GCC GTC CCG GCC CGG ACC GCT CCC GCC GCG CGC GAA ACC GCC GTC GCC GCG CGC

 A V P A R T A P A A R E T A V A A R
 P S R P G P L P P R A K P P S P R A
 R P G P D R S R R A R N R R R R A P

 V A G A Q F S D A G A E S C V T K V
 C R E R R S H T R E R R A A Y R R *
 A G S G G P I L G S G G R Q M G D E

 GCG TGG CGA GGG CGG ACC TTA CTC AGG CGA GGG CGG AGC GAC GTA TGG CAG AAG
 1197 1206 1215 1224 1233 1242
 CGC ACC GCT CCC GCC TGG AAT GAG TCC GCT CCC GCC TCG CTG CAT ACC GTC TTC

 R T A P A W N E S A P A S L H T V F
 A P L P P G M S P L P P R C I P S S
 H R S R L E * V R S R L A A Y R L H

 G G R V A A G A A L S V G G V G R R
 G A G C R R G R R S R C G A W G A G
 G R G A G G G G G R A V G R G G R A

 TGG GGC GGG GCG TGG CGG CGG GGG CGC TCG CTG TGG GGC GGG TGG GGC GCG

1251

1260

1269

1278

1287

1296

ACC CCG CCC CGC ACC GCC GCC CCC GCC GCG AGC GAC ACC CCG CCC ACC CCG CGC

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T P P R T A A P A A S D T P P T P R
P R P A P P P P P R A T P R P P R A
P A P H R R P R R E R H P A H P A P

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R R R C R R R R L T D R K T G P L D
G A V A V A D A Y R T A S R V R C T
A Q S P L P T P T A H R A E Y G A P

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GCG GAC GCT GCC GTT GCC GCA GCA TCG CAC AGC GCG AAG CAT GGG CCG TCC
1305 1314 1323 1332 1341 1350
CGC CTG CGA CGG CAA CGG CGT CGG CGT AGC GTG TCG CGC TTC GTA CCC GGC AGG

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R L R R Q R R R R S V S R F V P G R
A C D G N G V G V A C R A S Y P A G
P A T A T A S A * R V A L R T R Q V

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R G T H S W Q V L K P R S I H R I A
A D Q T A G S S W S L D A * T G F R
R T R H P E V P G V * T P K H A S D

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AGC GCA GGA CAC ACC GAG GTG ACC TGG TTG AAT CCA GCC GAA TAC ACG GCT TAG
1359 1368 1377 1386 1395 1404
TCG CGT CCT GTG TGG CTC CAC TGG ACC AAC TTA GGT CGG CTT ATG TGC CGA ATC

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S R P V W L H W T N L G R L M C R I
R V L C G S T G P T * V G L C A E S
A S C V A P L D Q L R S A Y V P N R

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W * V R R P A S R P W T N S V A G P
G D S V G H P P G Q G H T R Y P V P
G M L C A T P R V K A M H E I R C R

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CGG GTA GTC TGT GCG GCA CCC CGC CTG GAA CCG GTA CAC AAG CTA TGC CGT GGC
1413 1422 1431 1440 1449 1458
GCC CAT CAG ACA CGC CGT GGG GCG GAC CTT GGC CAT GTG TTC GAT ACG GCA CCG

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A H Q T R R G A D L G H V F D T A P
P I R H A V G R T L A M C S I R H R
P S D T P W G G P W P C V R Y G T G

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G P G A R R L S T S R G T R R C * R
A P D P V G Y V P P D A R A D A D D
P R T R C A T S Q H I P G H T Q M M

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CCC GGC CCA GGC CGT GCG GCA TCT GAC CAC CTA GCC GGG CAC GCA GAC GTA GTA
1467 1476 1485 1494 1503 1512
GGG CCG GGT CCG GCA CGC CGT AGA CTG GTG GAT CGG CCC GTG CGT CTG CAT CAT

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G P G P A R R L V D R P V R L H H
G R V R H A V D W W I G P C V C I I
A G S G T P * T G G S A R A S A S S
C R L D F F S R A G A W G A R F D E
A G F I S S P G P G L G A L G S T R

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Q V S S R L L V P G W G L W G Q L G
 GAC GTG GCT TCT AGC TTC TTC CTG GCC CGG GGT CGG GTC GGT CGG GAC TTC AGG
 1521 1530 1539 1548 1557 1566
 CTG CAC CGA AGA TCG AAG AAG GAC CGG GCC CCA GCC CAG CCA GCC CTG AAG TCC
 L H R R S K K D R A P A Q P A L K S
 C T E D R R R T G P Q P S Q P * S P
 A P K I E E G P G P S P A S P E V L
 * T R S T A V H R E R D S D D T Q R
 E R V P L R L T D S V I P I T P R G
 R V Y P F D C R T A * S R F R R D A
 AGA GTG CAT GCC CTT CAG CGT TGC ACA GCG AGT GCT AGC CTT AGC AGC CAG ACG
 1575 1584 1593 1602 1611 1620
 TCT CAC GTA CGG GAA GTC GCA ACG TGT CGC TCA CGA TCG GAA TCG TCG GTC TGC
 S H V R E V A T C R S R S E S S V C
 L T Y G K S Q R V A H D R N R R S A
 S R T G S R N V S L T I G I V G L P X1
 I D A L R G Q E V G Q G L V V H Q R
 F T P L D V R N L A R V L F S T S A
 S H R C T S G T * R G S W S R R A P
 GCT TAC AGC CGT TCA GCT GGG ACA AGT TGC GGG ACT GGT TCT TGC TGC ACG ACC
 1629 1638 1647 1656 1665 1674
 CGA ATG TCG GCA AGT CGA CCC TGT TCA ACG CCC TGA CCA AGA ACG ACG TGC TGG
 R M S A S R P C S T P * P R T T C W
 E C R Q V D P V Q R P D Q E R R A G
 N V G K S T L F N A L T K N D V L A
 G V V R E G R D L G V D T D H A D G
 A L * G N A V I S G L T P T T P T G
 P W S G T R W S R A W R R H R P R G
 GCC GGT TGA TGG GCA AGC GGT GCT AGC TCG GGT TGC AGC CAC AGC ACC CGC AGG
 1683 1692 1701 1710 1719 1728
 CGG CCA ACT ACC CGT TCG CCA CGA TCG AGC CCA ACG TCG GTG TCG TGG GCG TCC
 R P T T R S P R S S P T S V S W A S
 G Q L P V R H D R A Q R R C R G R P
 A N Y P F A T I E P N V G V V G V P
 V C A E G L Q G L D E G G L A D E R
 S A R R V L N A S I K E E W R M R G
 R R V G * W T P R S R R G A C G G
 GGC TGC GTG CGG AGT GGT TCA ACC GGC TCT AGA AGA GGA GGG TCG CGT AGG AGG
 1737 1746 1755 1764 1773 1782
 CCG ACG CAC GCC TCA CCA AGT TGG CCG AGA TCT TCT CCT CCC AGC GCA TCC TCC
 P T H A S P S W P R S S P P S A S S
 R R T P H Q V G R D L L L P A H P P
 D A R L T K L A E I F S S Q R I L P

R G D V E D V D G A D H A A G G L P
 A V T S K T S M A P M T R P A E S P
 P S R R S R R C R R C R A R R R R P

 GCC GCT GGC AGC TGA AGC AGC TGT AGC GGC CGT AGC ACG CGC CGC GGA GGC TCC
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 R R P S T S S T S P A S C A A P P R
 G D R R L R R H R R H R A R R L R G
 A T V D F V D I A G I V R G A S E G
 L A Q A V L E E R V D T L G V R D A
 S P R P L L N R A F M R S D S A I Q
 P P G P C C T G R S C G H T R R S R

 CCC TCC CGG ACC CGT TGT TCA AGG AGC GCT TGT AGG CAC TCA GGC TGC GCT AGA
 1845 1854 1863 1872 1881 1890
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 G R A W A T S S S R T S V S P T R S
 G G P G Q Q V P R E H P * V R R D L
 E G L G N K F L A N I R E S D A I C
 L D D A G E L V L V D D M D V A L D
 W T M R A K L S S F T T W T S P L T
 G P * G R R * P R S R R G H R R C P

 CGG TCC AGT AGG CGC GGA AGT TCC TGC TCT TGC AGC AGG TAC AGC TGC CGT TCC
 1899 1908 1917 1926 1935 1944
 GCC AGG TCA TCC GCG CCT TCA AGG ACG AGA ACG TCG TCC ATG TCG ACG GCA AGG

 A R S S A P S R T R T S S M S T A R
 P G H P R L Q G R E R R P C R R Q G
 Q V I R A F K D E N V V H V D G K V
 R G L V V D L R D V G L Q D E R V E
 E G L S S M S V I L V S S I R A S R
 R A W P R C R S S * C R A S G R P G

 AGA GCG GGT TCC TGC TGT AGC TCT GCT AGT TGT GGC TCG ACT AGG AGC GCC TGG
 1953 1962 1971 1980 1989 1998
 TCT CGC CCA AGG ACG ACA TCG AGA CGA TCA ACA CCG AGC TGA TCC TCG CGG ACC

 S R P R T T S R R S T P S * S S R T
 L A Q G R H R D D Q H R A D P R G P
 S P K D D I E T I N T E L I L A D L
 L R D L D Q G A E L L V R P D L L
 W V I S F T R G R R W F S E R I L F
 G S S R S P G A G G G S P S A S * S

 AGG TCT GCT AGC TCT TCC AGG ACG GGG CGG AGG TCT TCC TGA GCG CCT AGT TCT
 2007 2016 2025 2034 2043 2052
 TCC AGA CGA TCG AGA AGG TCC TGC CCC GCC TCC AGA AGG ACT CGC GGA TCA AGA

S R R S R R S C P A S R R T R G S R
 P D D R E G P A P P P E G L A D Q E
 Q T I E K V L P R L Q K D S R I K K
 V E R R L H L G D L L G L L D Q L P
 S R A G F T F A T S S A L S I R S L
 P G R A S P S P R R P P W P S G P S

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 2061 2070 2079 2088 2097 2106
 AGG ACC TCG CGC CGA AGG TGA AGG CCG TCG AGG AGG CCA AGG AGA TCC TGG AGA

 R T S R R R * R P S R R P R R S W R
 G P R A E G E G R R G G Q G D P G E
 D L A P K V K A V E E A K E I L E R
 A V G E E G V A D D L A G L A V L E
 P S V R K A W P M T W P V S R L S S
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 CCC CGC TGT GGG AGA AGC GGG TGC CGT AGC AGG TCC CGT GGC TCG CGT TGC TCG
 2115 2124 2133 2142 2151 2160
 GGG GCG ACA CCC TCT TCG CCC ACG GCA TCG TCC AGG GCA CCG AGC GCA ACG AGC

 G A T P S S P T A S S R A P S A T S
 G R H P L R P R H R P G H R A Q R A
 G D T L F A H G I V Q G T E R N E L
 Q V V Q V Q E G G L G E E V D E V D
 R C S R C R S V V L G K R * T K L T
 G A R G A G A * W W A R G R R R * R

 AGG ACG TGC TGG ACG TGG ACG AGT GGT GGT TCG GGA AGG AGA TGC AGA AGT TGC
 2169 2178 2187 2196 2205 2214
 TCC TGC ACG ACC TGC ACC TGC TCA CCA CCA AGC CCT TCC TCT ACG TCT TCA ACG

 S C T T C T C S P P S P S S T S S T
 P A R P A P A H H Q A L P L R L Q R
 L H D L H L L T T K P F L Y V F N V
 V L V L Q D V L V E L V L L A G Q D
 S S S S S I S S S K L F S C R A R T
 R R P R A S R R P S * S R A A R G P

 AGC TGC TCC TGC TCG ACT AGC TGC TCC TGA AGT TCT TGC TCG TCG CGC GGG ACC
 2223 2232 2241 2250 2259 2268
 TCG ACG AGG ACG AGC TGA TCG ACG AGG ACT TCA AGA ACG AGC AGC GCG CCC TGG

 S T R T S * S T R T S R T S S A P W
 R R G R A D R R G L Q E R A A R P G
 D E D E L I D E D F K N E Q R A L V
 G G G L G D E E V G L Q L G V E G L
 A G A S A M K R L A L S S A S R A S
 R G R R P W R G * R W A P P R G R R

 AGC GGG GGC GGC TCC GGT AGA AGG AGT TGC GGT TCG ACC TCC GGC TGG AGC GGC

2277

2286

2295

2304

2313

2322

TCG CCC CCG CCG AGG CCA TCT TCC TCA ACG CCA AGC TGG AGG CCG ACC TCG CCG

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S P P P R P S S S T P S W R P T S P
R P R R G H L P Q R Q A G G R P R R
A P A E A I F L N A K L E A D L A E

```

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E V V V L G E F E E L G D A L V L G
S S S S S A R S S R W D T P W S S G
A R R R R P G R V G G T R R G P R A

```

TCG AGC TGC TGC TGC TCC GGG AGC TTG AGG AGG TCA GGC AGC CGG TCC TGC TCG
2331 2340 2349 2358 2367 2376
AGC TCG ACG ACG ACG AGG CCC TCG AAC TCC TCC AGT CCG TCG GCC AGG ACG AGC

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S S T T T R P S N S S S P S A R T S
A R R R R G P R T P P V R R P G R A
L D D D E A L E L L Q S V G Q D E P

```

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A E G G E G A D A E V G E A Q L G V
P R A V R A R T P K L V R P R C V *
R G R W G R G R R S * C G R G A S R

```

GGC CGG AGC GGT GGG AGC GGG CGC AGC CGA AGT TGT GGG AGC CGG AGC TCT GGA
2385 2394 2403 2412 2421 2430
CCG GCC TCG CCA CCC TCG CCC GCG TCG GCT TCA ACA CCC TCG GCC TGC AGA CCT

```

P A S P P S P A S A S T P S A C R P
R P R H P R P R R L Q H P R P A D L
G L A T L A R V G F N T L G L Q T Y

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Q R G A R L F G A G P G D L L A G G
R V A P G F S D R A Q V M L F P A V
G S P R G S P I G R R S W * S P R W

```

TGG ACT GCC GGC CGG GCT TCC TTA GGG CGC GGA CCT GGT AGT TCT TCC CGC GGT
2439 2448 2457 2466 2475 2484
ACC TGA CGG CCG GCC CGA AGG AAT CCC GCG CCT GGA CCA TCA AGA AGG GCG CCA

```

T * R P A R R N P A P G P S R R A P
P D G R P E G I P R L D H Q E G R H
L T A G P K E S R A W T I K K G A T

```

```

G G L G G A D D V G V E L L A E D L
A G S A A P T M W V S K W F P K M L
R G R P R R R * G C R S G S P S * *

```

GGC GGG GGC TCC GGC GGC CGC AGT AGG TGT GGC TGA AGG TCT TCC CGA AGT AGT
2493 2502 2511 2520 2529 2538
CCG CCC CCG AGG CCG CCG GCG TCA TCC ACA CCG ACT TCC AGA AGG GCT TCA TCA

```

P P P R P P A S S T P T S R R A S S
R P R G R R H P H R L P E G L H Q
A P E A A G V I H T D F Q K G F I K

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R L D D G E G V Q H L G A G D G L G
A S T M E K V S R T S V P E T A S A

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P	P	P	*	R	R	*	R	G	P	P	S	R	S	R	R	R	P
TCC	GCC	TCC	AGT	AGA	GGA	AGT	GGC	TGG	ACC	ACC	TCT	GGC	CGA	GGC	AGC	GGC	TCC
2547		2556		2565		2574		2583		2592							
AGG	CGG	AGG	TCA	TCT	CCT	TCA	CCG	ACC	TGG	TGG	AGA	CCG	GCT	CCG	TCG	CCG	AGG
R	R	R	S	S	P	S	P	T	W	W	R	P	A	P	S	P	R
G	G	G	H	L	L	H	R	P	G	G	D	R	L	R	R	R	G
A	E	V	I	S	F	T	D	L	V	E	T	G	S	V	A	E	A
A	R	L	P	L	R	T	H	L	A	L	V	I	H	H	L	V	P
R	A	F	P	F	A	R	I	S	P	L	S	*	T	I	C	S	P
G	R	S	P	S	P	A	Y	P	P	C	P	S	H	S	A	P	R
GGG	CGC	GCT	TCC	CCT	TCC	GCG	CAT	ACC	TCC	CGT	TCC	TGA	TAC	ACT	ACG	TCC	TGC
2601		2610		2619		2628		2637		2646							
CCC	GCG	CGA	AGG	GGA	AGG	CGC	GTA	TGG	AGG	GCA	AGG	ACT	ATG	TGA	TGC	AGG	ACG
P	A	R	R	G	R	R	V	W	R	A	R	T	M	*	C	R	T
P	R	E	G	E	G	A	Y	G	G	Q	G	L	C	D	A	G	R
R	A	K	G	K	A	R	M	E	G	K	D	Y	V	M	Q	D	G
V	H	D	L	E	A	E	V	H	L	R	L	E	V	V	V	S	S
S	T	T	S	N	R	K	L	T	Y	A	C	N	W	W	S	A	A
P	R	P	R	T	G	S	*	R	T	P	A	I	G	G	R	R	Q
CCC	TGC	ACC	AGC	TCA	AGG	CGA	AGT	TGC	ACA	TCC	GCG	TTA	AGG	TGG	TGC	TGC	GAC
2655		2664		2673		2682		2691		2700							
GGG	ACG	TGG	TCG	AGT	TCC	GCT	TCA	ACG	TGT	AGG	CGC	AAT	TCC	ACC	ACG	ACG	CTG
G	T	W	S	S	S	A	S	T	C	R	R	N	S	T	T	T	L
G	R	G	R	V	P	L	Q	R	V	G	A	I	P	P	R	R	C
D	V	V	E	F	R	F	N	V	*	A	Q	F	H	H	D	A	A
E	F	A	C	T	L	L	P	R	S	R	W	P	A	A	G	Q	Q
K	L	R	A	P	*	F	P	D	V	G	G	P	P	P	G	K	S
K	*	V	R	L	D	S	P	T	S	E	E	L	P	R	G	R	A
GAA	AGT	TTG	CGC	GTC	CAG	TCT	TCC	CCA	GCT	GAG	GAG	GTC	CCC	CGC	CGG	GGA	ACG
2709		2718		2727		2736		2745		2754							
CTT	TCA	AAC	GCG	CAG	GTC	AGA	AGG	GGT	CGA	CTC	CTC	CAG	GGG	GCG	GCC	CCT	TGC
L	S	N	A	Q	V	R	R	G	R	L	L	Q	G	A	A	P	C
F	Q	T	R	R	S	E	G	V	D	S	S	R	G	R	P	L	A
F	K	R	A	G	Q	K	G	S	T	P	P	G	G	G	P	L	L
K	G	H	Q	S	P	A	P	F	A	S	*	G	D	T	K	A	R
N	G	T	S	P	H	H	Q	S	L	Q	D	D	M	L	R	Q	G
T	E	R	A	P	I	T	S	P	F	S	I	M	W	*	D	K	G
ACA	AAG	GCG	ACG	ACC	CTA	CCA	CGA	CCC	TTT	CGA	CTA	GTA	GGT	AGT	CAG	AAA	CGG
2763		2772		2781		2790		2799		2808							
TGT	TTC	CCG	TGC	TGG	GAT	GGT	GCT	GGG	AAA	GCT	GAT	CAT	CCA	TCA	GTC	TTT	GCC
C	F	P	C	W	D	G	A	G	K	A	D	H	P	S	V	F	A
V	S	R	A	G	M	V	L	G	K	L	I	S	H	Q	S	L	P
F	P	V	L	G	W	C	W	E	S	*	S	S	I	S	L	C	P

G S S T L L P V N N P V V Q P F P D
 A P P H * S H Y T I L Y W K L S P T
 Q R L I D L T T R * * T G S S P L P

GAC GGC CTC CTA CAG TTC TCA CCA TGC AAT AAT CCA TGG TGA ACT CCC TTC CCC
 2817 2826 2835 2844 2853 2862
 CTG CCG GAG GAT GTC AAG AGT ACG TTA TTA GGT ACC ACT TGA GGG AAG GGG

L P E D V K S G T L L G T T * G K G
 C R R M S R V V R Y * V P L E G R G
 A G G C Q E W Y V I R Y H L R E G V

F * T S L G R A F G C P E R E A S *
 S D H R Y V A L S A A L S E K R Q D
 R I M D I F R S R L R L A R K G S I

AGC TTA GTA CAG CTA TTT GGC GCT CGC TTC GGC GTT CCG AGA GAA AGG CGA CTA
 2871 2880 2889 2898 2907 2916
 TCG AAT CAT GTC GAT AAA CCG CGA GCG AAG CCG CAA GGC TCT CTT TCC GCT GAT

S N H V D K P R A K P Q G S L S A D
 R I (M) S I N R E R S R K A L F P L I XZ
 E S C R * T A S E A A R L S F R * S

S P * R C D R P W R S R R W A R C R
 L L D V V I V L G D L D D G L V A V
 L F T L S L * S A M S I T E L C P L

GTT CTT CCA GTT GCT GTT AGT GCT CCG GTA GCT CTA GCA GAG GTT CGT GCC GTT
 2925 2934 2943 2952 2961 2970
 CAA GAA GGT CAA CGA CAA TCA CGA GGC CAT CGA GAT CGT CTC CAA GCA CGG CAA

Q E G Q R Q S R G H R D R L Q A R Q
 K K V N D N H E A I E I V S K H G N
 R R S T T I T R P S R S S P S T A T

R V R R P R P N H L A A R P S T G A
 G Y E D R G L I I C R Q A L A R V Q
 A T S T E A S S * A A S R S P E Y R

GCG GCA TGA GCA GAG CCG GCT CCT AAT ACG TCG CGA CGC GCT CCC GAG CAT GGA
 2979 2988 2997 3006 3015 3024
 CGC CGT ACT CGT CTC GGC CGA GGA TTA TGC AGC GCT GCG CGA GGG CTC GTA CCT

R R T R L G R G L C S A A R G L V P
 A V L V S A E D Y A A L R E G S Y L
 P Y S S R P R I M Q R C A R A R T C

A S E P S R G D V A * P T R S R G Q
 Q A R R R V G T S Q E L R V L V G K
 S R E G A F A R R S S L A Y S F A R

CGA CGC GAG AGG CCG CTT GCG GGC AGC TGA CGA GTT CCG CAT GCT CTT GCG GGA
 3033 3042 3051 3060 3069 3078
 GCT GCG CTC TCC GGC GAA CGC CCG TCG ACT GCT CAA GGC GTA CGA GAA CGC CCT

A A L S G E R P S T A Q G V R E R P
L R S P A N A R R L L K A Y E N A L
C A L R R T P V D C S R R T R T P L

G R * H T P A P A S R D P N P P R Q
G V D I H R L P L Q D I R I R R V S
A W T L T D S R S S I S G S E A S A

ACG GGT GCA GTT ACA CAG CCT CGC CCT CGA CTA GCT AGG CCT AAG CCG CCT GCG
3087 3096 3105 3114 3123 3132

TGC CCA CGT CAA TGT GTC GGA GCG GGA GCT GAT CGA TCC GGA TTC GGC GGA CGC

C P R Q C V G A G A D R S G F G G R
A H V N V S E R E L I D P D S A D A
P T S M C R S G S * S I R I R R T L

N P H R T L S T K S S * P Q S S * V
T R T G R S A Q R R P D P S P H S C
P E P A A H P K D E L I L A P I V V

ACC AAG CCC ACG GCG CAC TCC GAA CAG AAG CTC CTA GTC CCG ACC CTA CTG ATG
3141 3150 3159 3168 3177 3186

TGG TTC GGG TGC CGC GTG AGG CTT GTC TTC GAG GAT CAG GGC TGG GAT GAC TAC

W F G C R (V) R L V F E D Q G W D D Y X3
G S G A A * G L S S R I R A G M T T
V R V P R E A C L R G S G L G * L H

D Q S L F S R L I S A R M L L S M S
T R A * S R G C S A R G C * C A * R
R G P E L V V A L H E G A D V L E D

TGC AGG ACC GAG TTC TTG CTG GCG TTC TAC GAG CGG GCG TAG TTG TTC GAG TAG
3195 3204 3213 3222 3231 3240

ACG TCC TGG CTC AAG AAC GAC CGC AAG ATG CTC GCC CGC ATC AAC AAG CTC ATC

T S W L K N D R K M L A R I N K L I
R P G S R T T A R C S P A S T S S S
V L A Q E R P Q D A R P H Q Q A H R

S T L R S G K V P I P L G S G S F Y
P R * A R G R * P S R C V R A A S T
L V D P A V G E R P D A F G L R Q L

CTC CTG CAG TCC GCG CTG GGG AAG TGC CCC TAG CCG TTT GGG CTC GGC GAC TTC
3249 3258 3267 3276 3285 3294

GAG GAC GTC AGG CGC GAC CCC TTC ACG GGG ATC GGC AAA CCC GAG CCG CTG AAG

E D V R R D P F T G I G K P E P L K
R T S G A T P S R G S A N P S R * S
G R Q A R P L H G D R Q T R A A E V

W K G P A H D R R I S S S C R R T Y
G S A P P T T A A S R R R V G G R T
V V Q R P R P R P P D V V F V A E H

ATG GTG AAC GGC CCC CGC ACC AGC GCC GCC TAG CTG CTG CTT GTG GCG GAG CAC

3303 3312 3321 3330 3339 3348
TAC CAC TTG CCG GGG GCG TGG TCG CGG CGG ATC GAC GAC GAA CAC CGC CTC GTG

Y H L P G A W S R R I D D E H R L V
T T C R G R G R G S T T N T A S C
P L A G G V V A A D R R R T P P R V
R T V S L S I T I R A A R Y W * Q S
G P * P C P S R S G R Q G T G S S V
V Q N R V L L D H D E S G P V V V S

ATG GAC CAA TGC CTG TTC CTC TAG CAC TAG GAG CGA CGG GCC ATG GTG ATG ACT
3357 3366 3375 3384 3393 3402
TAC CTG GTT ACG GAC AAG GAG ATC GTG ATC CTC GCT GCC CGG TAC CAC TAC TGA

Y L V T D K E I V I L A A R Y H Y *
T W L R T R R S * S S L P G T T T D
P G Y G Q G D R D P R C P V P L L T
G L H D E R A P I T S P H A G R V R
A W T T R G H Q S P A P I P G E F G
Q G P P G G T S P H H Q S P G R S G

GAC GGG TCC ACC AGG AGG GCA CGA CCC TAC CAC GAC CCT ACC CGG GGA GCT TGG
3411 3420 3429 3438 3447 3456
CTG CCC AGG TGG TCC TCC CGT GCT GGG ATG GTG CTG GGA TGG GCC CCT CGA ACC

L P R W S S R A G M V L G W A P R T
C P G G P P V L G W C W D G P L E P
A Q V V L P C W D G A G M G P S N P
H K R L H S S Q L * H E A E V N L R
I N G C T P A R Y N I N R K L T * A
S T E A P P L E T T L T G S * R K P

GCT ACA AAG GCG TCC ACC CTC GAG ACA TCA ATT ACA AGG CGA AGT TGC AAA TCC
3465 3474 3483 3492 3501 3510
CGA TGT TTC CGC AGG TGG GAG CTC TGT AGT TAA TGT TCC GCT TCA ACG TTT AGG

R C F R R W E L C S * C S A S T F R
D V S A G G S S V V N V P L Q R L G
M F P Q V G A L * L M F R F N V * A
L D V V D D Q Q I R L D S P D S E D
C I W W T T K N F A C T L P T R S M
A S G G R R T S H A P * L P G V *

GCG TCT AGG TGG TGC AGC AGA ACA ACT TAC GCG TCC AGT CTC CCC AGG CTG AGT
3519 3528 3537 3546 3555 3564
CGC AGA TCC ACC ACG TCG TCT TGT TGA ATG CGC AGG TCA GAG GGG TCC GAC TCA

R R S T T S S C * M R R S E G S D S
A D P P R R L V E C A G Q R G P T H
Q I H H V V L L N A Q V R G V R L I
S D P G Q S K G T G G A S Q S N S L
P T P G R A R E R A E P L S P T A *

ACGCGTGGCGCGCG

R	L	R	A	G	P	E	K	G	H	R	R	C	V	P	L	Q	E	
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AGC	CTC	AGC	CCG	GGG	ACC	GAG	AAA	GGG	CAC	GGA	GCG	CGT	CTG	ACC	CTC	AAC	GAG	
3573				3582			3591			3600			3609			3618		
TCG	GAG	TCG	GGC	CCC	TGG	CTC	TTT	CCC	GTG	CCT	CCG	GCA	GAC	TGG	GAG	TTG	CTC	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
S	E	S	G	P	W	L	F	P	V	P	P	A	D	W	E	L	L	
R	S	R	A	P	G	S	F	P	C	L	R	Q	T	G	S	C	S	
G	V	G	P	L	A	L	S	R	A	S	G	R	L	G	V	A	Q	
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*	*	R	G	I	P	C	Y	P	G	T	W	L	A	L	A	S	W	
D	D	G	A	S	R	A	T	P	G	Q	G	S	R	W	R	P	G	
T	M	V	Q	R	D	P	L	L	A	R	D	L	A	G	A	R	V	
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TCA	GTA	GTG	GAC	GGC	TAG	CCC	GTC	ATC	CCG	GGA	CAG	GTC	TCG	CGG	TCG	CGC	CTG	
3627			3636			3645			3654			3663			3672			
AGT	CAT	CAC	CTG	CCG	ATC	GGG	CAG	TAG	GGC	CCT	GTC	CAG	AGC	GCC	AGC	GCG	GAC	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
S	H	H	L	P	I	G	Q	*	G	P	V	Q	S	A	S	A	D	
V	I	T	C	R	S	G	S	R	A	L	S	R	A	P	A	R	T	
S	S	P	A	D	R	A	V	G	P	C	P	E	R	Q	R	G	P	
N	S	P	I	M	Q	R	D	T	G	T	L	I	E	A	D	A	H	
T	P	L	S	*	R	A	T	R	V	P	S	S	R	P	T	P	T	
L	Q	F	P	D	D	P	P	G	Y	R	H	P	D	R	R	R	R	
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GTC	AAC	CTT	CCC	TAG	TAG	ACC	GCC	AGG	CAT	GGC	CAC	TCC	TAG	AGC	CGC	AGC	CGC	
3681			3690			3699			3708			3717			3726			
CAG	TTG	GAA	GGG	ATC	ATC	TGG	CGG	TCC	GTA	CCG	GTG	AGG	ATC	TCG	GCG	TCG	GCG	
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Q	L	E	G	I	I	W	R	S	V	P	V	R	I	S	A	S	A	
S	W	K	G	S	S	G	G	P	Y	R	*	G	S	R	R	R	R	
V	G	R	D	H	L	A	V	R	T	G	E	D	L	G	V	G	V	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
T	G	F	R	A	L	T	F	C	H	A	G	G	S	F	C	F	E	
P	A	S	A	P	W	P	S	A	T	P	A	A	P	S	A	S	S	
P	H	R	L	P	G	P	H	L	L	P	R	R	L	L	L	V		
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
ACC	CAC	GGC	TTC	GCC	CGG	TCC	CAC	TTC	GTC	ACC	CGC	GGC	GGC	CTC	TTC	GTC	TTG	
3735			3744			3753			3762			3771			3780			
TGG	GTG	CCG	AAG	CGG	GCC	AGG	GTG	AAG	CAG	TGG	GCG	CCG	CCG	GAG	AAG	CAG	AAC	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
W	V	P	K	R	A	R	V	K	Q	W	A	P	P	E	K	Q	N	
G	C	R	S	G	P	G	*	S	S	G	R	R	R	R	S	R	T	
G	A	E	A	G	Q	G	E	A	V	G	A	A	G	E	A	E	L	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
S	A	P	P	L	D	G	I	R	E	R	F	T	A	R	R	G	V	
A	P	R	P	C	T	A	S	A	N	A	S	R	P	A	D	A	*	
R	Q	G	P	A	P	R	R	H	T	R	P	V	H	R	T	P	R	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
AGC	GAC	CGG	CCC	CCG	TCC	AGC	GGC	TAC	GCA	AGC	GCC	TTG	CAC	CGC	GCA	GCC	GGA	
3789			3798			3807			3816			3825			3834			
TCG	CTG	GCC	GGG	GGC	AGG	TCG	CCG	ATG	CGT	TCG	CGG	AAC	GTG	GCG	CGT	CGG	CCT	
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S	L	A	G	G	R	S	P	M	R	S	R	N	V	A	R	R	P	
R	W	P	G	A	G	R	R	C	V	R	G	T	W	R	V	G	L	
A	G	R	G	Q	V	A	D	A	F	A	E	R	G	A	S	A	Y	

G I L W A A T L R S R W E Y G L L A
 A S * G P P P S A H A G S T A S S P
 R R D A L R R H P T L A V R L R P P

 TGC GGC TAG TCG GTC CGC CGC CAC TCC GCA CTC GCG GTG AGC ATC GGC TCC TCC
 3843 3852 3861 3870 3879 3888
 ACG CCG ATC AGC CAG GCG GCG GTG AGG CGT GAG CGC CAC TCG TAG CCG AGG AGG

 T P I S Q A A V R R E R H S * P R R
 R R S A R R R * G V S A T R S R G G
 A D Q P G G E A * A P L V A E E G

 E W E A H T I T A A D D I L H R T F
 R G S P M P S R P Q T T S S T V P S
 G G V R C P H D H S R R R H P S P H

 CGG AGG GTG AGC CGT ACC CAC TAG CAC CGA CGC AGC AGC TAC TCC ACT GCC CAC
 3897 3906 3915 3924 3933 3942
 GCC TCC CAC TCG GCA TGG GTG ATC GTG GCT GCG TCG TCG ATG AGG TGA CGG GTG

 A S H S A W V I V A A S S M R * R V
 P P T R H G * S W L R R R * G D G *
 L P L G M G D R G C V V D E V T G E

 R E A H P W G P R L V R G S K L D R
 A N P T P G G P G C S A V A K * T A
 L T R R P A V R A A P R S R K E P R

 TTC GCA AGC CGC ACC CCG GTG GGC CCG GCG TCC TGC GCT GGC GAA AAG TCC AGC
 3951 3960 3969 3978 3987 3996
 AAG CGT TCG GCG TGG GGC CAC CCG GGC CGC AGG ACG CGA CCG CTT TTC AGG TCG

 K R S A W G H P G R R T R P L F R S
 S V R R G A T R A A G R D R F S G R
 A F G V G P P G P Q D A T A F Q V A

 C R P R D S D K S T V Y R E I V Y G
 A A R A T R T R A R * T A S S * T A
 P L A P P G L G Q E D R L A R D R L

 GCC GTC GCG CCC GCC AGG CTC AGG AAC GAG CAG TGC ATC GCG AGC TAG TGC ATC
 4005 4014 4023 4032 4041 4050
 CGG CAG CGC GGG CGG TCC GAG TCC TTG CTC GTC ACG TAG CGC TCG ATC ACG TAG

 R Q R G R S E S L L V T * R S I T *
 G S A G G P S P C S S R S A R S R S
 A A R A V R V L A R H V A L D H V A

 Y G S E E S H Q F P M P W R E P Y L
 T A A R R P T S S R C R G G R R T C
 R L R E G R L A P V A D A V E G P V

 GGC ATC GGC GAG AGG AGC CTC ACG ACC TTG CCG TAG CCG GTG GAG AGG CCC ATG
 4059 4068 4077 4086 4095 4104
 CCG TAG CCG CTC TCC TCG GAG TGC TGG AAC GGC ATC GGC CAC CTC TCC GGG TAC

P * P L S S A E C W N G I G H L S G Y
 R S R S P R S A G T A S A T S P G T
 V A A L L G V L E R H R P P L R V Q
 D T R D I W T P A V F I S G G V P A
 I P V T S G P P P S S S A A A S P P
 S R Y P R D L H P R R L H Q R R R P

 TCT AGC CAT GCC AGC TAG GTC CAC CCC CGC TGC TTC TAC GAC GGC GGC TGC CCC
 4113 4122 4131 4140 4149 4158
 AGA TCG GTA CGG TCG ATC CAG GTG GGG GCG ACG AAG ATG CTG CCG CCG ACG GGG

 R S V R S I Q V G A T K M L P P T G
 D R Y G R S R W G R R R C C R R R G
 I G T V D P G G G D E D A A A A D G G
 E S A E L L S W T H S E E V L H E W
 K P P K W C P G P T P S K S W T N G
 S R L S G A P V L H P V R R G P T G

 CGA AGC CTC CGA AGG TCG TCC CTG GTC CAC ACC CTG AGA AGC TGG TCC ACA AGG
 4167 4176 4185 4194 4203 4212
 GCT TCG GAG GCT TCC AGC AGG GAC CAG GTG TGG GAC TCT TCG ACC AGG TGT TCC

 A S E A S S R D Q V W D S S T R C S
 L R R L P A G T R C G T L R P G V P
 F G G F Q Q G P G V G L F D Q V F P
 P A S W D L E W D L G T G S I G Y T
 P R A G T S N G T W A P A P S A T R
 L A R E L R T G L G P R H R L H R V

 GTC CCG CGC GAG GTC AGC TCA AGG GTC AGG TCC GGC CAC GGC CTC TAC GGC ATG
 4221 4230 4239 4248 4257 4266
 CAG GGC GCG CTC CAG TCG AGT TCC CAG TCC AGG CCG GTG CCG GAG ATG CCG TAC

 Q G A L Q S S S Q S R P V P E M P Y
 R A R S S R V P S P G R C R R C R T
 G R A P V E F P V Q A G A G D A V R
 R D A D V R W F R S H L I V Q A H D
 A T P T W G G S G P T S S * K P T T X4
 H P R R G G A L V P L P P D S P R P

 CAC GCC AGC CGC AGG TGG GCG GTC TTG GCC CTC ACC TCC TAG TGA ACC CGC ACC
 4275 4284 4293 4302 4311 4320
 GTG CGG TCG GCG TCC ACC CGC CAG AAC CGG GAG TGG AGG ATC ACT TGG GCG TGG

 V R S A S T R Q N R E W R I T W A W
 C G R R P P A R T G S G G S L G R G
 A V G V H P P E P G V E D H L G V V
 A L D N I I E T F H A P A S N P * P
 P W T T S S R P S T P P R R T R D P
 R G P R Q H D R H L P R A G L E T L

 AGC CGG TCC AGC AAC TAC TAG AGC CAC TTC ACC CGC CCG CGG CTC AAG CCA GTC

4329

4338

4347

4356

4365

4374

TCG GCC AGG TCG TTG ATG ATC TCG GTG AAG TGG GCG GGC GCC GAG TTC GGT CAG

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S A R S L M I S V K W A G A E F G Q
R P G R * * S R * S G R A P S S V R
G Q V V D D L G E V G G R R V R S G

```

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G A G M G Q R Q P R * R G A P R D P
G R A W E R V S P D D A D L L A I L
A G R G N G S A P T T L T W C P S *

```

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CCG GGG CGC GGG TAA GGG ACT GCG ACC CCA GCA GTC GCA GGT CGT CCC GCT AGT
4383 4392 4401 4410 4419 4428
GGC CCC GCG CCC ATT CCC TGA CGC TGG GGT CGT CAG CGT CCA GCA GGG CGA TCA

```

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G P A P I P * R W G R Q R P A G R S
A P R P F P D A G V V S V Q Q G D Q
P R A H S L T L G S S A S S R A I R

```

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R P L L T P R S G R R L G R H R D A
A P C C R P D A V E E F V E I A T L
P P A A A H T Q * R K S S R S P P *

```

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CCC GCC CCG TCG TCG CAC CCA GAC GAT GGA GAA GCT TCT GGA GCT ACC GCC AGT
4437 4446 4455 4464 4473 4482
GGG CGG GGC AGC AGC GTG GGT CTG CTA CCT CTT CGA AGA CCT CGA TGG CGG TCA

```

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G R G S S V G L L P L R R P R W R S
G G A A A W V C Y L F E D L D G G Q
A G Q Q R G S A T S S K T S M A V S

```

```

P R L Q G P Y A A R R H D Y P N R *
R G F S G L T P L G G I I T L I A D
G A S A A W P L C G A S S R L S Q T

```

```

CGG CCG GCT TCG ACG GGT CCC ATC CGT CGG GCG GCT ACT AGC ATT CCT AAC GCA
4491 4500 4509 4518 4527 4536
GCC GGC CGA AGC TGC CCA GGG TAG GCA GCC CGC CGA TGA TCG TAA GGA TTG CGT

```

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A G R S C P G * A A R R * S * G L R
P A E A A Q G R Q P A D D R K D C V
R P K L P R V G S P P M I V R I A S

```

```

S R H R G A A R P R R I L R R R R
R G I D V L Q A R A A Y S A D D D G
V V S T S W S R A P P T H P T T T A

```

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GTG CTG GCT ACA GCT GGT CGA CGC GCG CCC GCC GCA TAC TCC GCA GCA GCA GCG
4545 4554 4563 4572 4581 4590
CAC GAC CGA TGT CGA CCA GCT GCG CGC GGG CGG CGT ATG AGG CGT CGT CGT CGC

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H D R C R P A A R G R R M R R R R
T T D V D Q L R A G G V * G V V V A
R P M S T S C A R A A Y E A S S S P
R A A P R P D R H P P D H H A P H G
D L Q Q V L T E I H P T T T R R T A

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T S S S S P R S T P P R P A G P P

 GCA GCT CGA CGA CCT GCT CCC AGA GCT ACA CCC CCC AGC ACC ACG CGG CCC ACC
 4599 4608 4617 4626 4635 4644
 CGT CGA GCT GCT GGA CGA GGG TCT CGA TGT GGG GGG TCG TGG TGC GCC GGG TGG

 R R A A G R G S R C G G S W C A G W
 V E L L D E G L D V G G R G A P G G
 S S C W T R V S M W G V V V R R V A

 H R W L H P A V L L A G P P R R A V
 M V G S T P L W W C L A P R D D P W
 W S A L P P S G G A S R R A T T P G

 GGT ACT GCG GTC TCC ACC CCT CGG TGG TCG TCT CGC GGC CCG CCA GCA GCC CGG
 4653 4662 4671 4680 4689 4698
 CCA TGA CGC CAG AGG TGG GGA GCC ACC AGC AGA GCG CCG GGC GGT CGT CGG GCC

 P * R Q R W G A T S R A P G G R R A
 H D A R G G E P P A E R R A V V G P
 M T P E V G S H Q Q S A G R S S G H

 P R P G R S G P R R L P R T D P R R
 P A R D E A A R D E F P A R T L D V
 R P A T R P Q G T K S P P A H * T S

 T G R G P R L P G L R R G R V S G R
 R G A V L G C P V F E G G A C Q V D
 G A R S S A A R S S K G A R V R S T

 P A L R P R A A R G R G A P P R V A
 P R W A P D L P E D E A P P R V Y R
 P A G P P T S R S T R P R R A S T G

 GCC CCG CGG TCC GCC CCA GCT CGC CGA GCA GGA GCC GGC CGC CCG CCT GCA TGG
 4761 4770 4779 4788 4797 4806
 CGG GGC GCC AGG CGG GGT CGA GCG GCT CGT CCT CGG CCG GCG GGC GGA CGT ACC

 R G A R R G R A A R P R P A G G R T
 G A P G G V E R L V L G R R A D V P
 G R Q A G S S G S S S A G G R T Y R

 S R A P R L A C Q D R A V D R C G G
 R G H Q A C P A N I G H S T V A A G X5
 G V T S P A P R M S G T R R * P L G

 CGG CTG GCA CGA CCC GCG TCC CGC GTA ACT AGG GCA CGC TGC AGT GCC GTC GGG
 4815 4824 4833 4842 4851 4860
 GCC GAC CGT GCT GGG CGC AGG GCG CAT TGA TCC CGT GCG ACG TCA CGG CAG CCC

 A D R A G R R A H * S R A T S R Q P
 P T V L G A G R I D P V R R H G S P
 R P C W A Q G A L I P C D V T A A P

P R G * P P A R L * K T L A L L P L
 Q G A E L R P A C D N Q L H W S R F
 R A P R L A P R A T M K Y T G P A S

 GGA CCG GCC GGA GTT CCG CCC CGC GCG TCA GTA AAA CAT TCA CGG TCC TCG CCT
 4869 4878 4887 4896 4905 4914
 CCT GGC CGG CCT CAA GGC GGG GCG CGC AGT CAT TTT GTA AGT GCC AGG AGC GGA

 P G R P Q G G A R S H F V S A R S G
 L A G L K A G R A V I L * V P G A E
 W P A S R R G A Q S F C K C Q E R K

 Y A G E F P L I V H L A S A P P E A
 I P E K S H C S * T S L P R R R S P
 S L S R R I A L D R P S R V G A A R

 TCT ATC CGA GGA AGC TTA CCG TTC TAG TGC ACC TCT CGC CTG CGG CCG CCG AGC
 4923 4932 4941 4950 4959 4968
 AGA TAG GCT CCT TCG AAT GGC AAG ATC ACG TGG AGA GCG GAC GCC GGC TCG

 R * A P S N G K I T W R A D A G G S
 D R L L R (M) A R S R G E R T P A A R
 I G S F E W Q D H V E S G R R R L G Rb

 S * R V C R E N G A T A P V A R C G
 P D G * A V S T E L L P L C Q E A V
 R I V E R L A R K W C H C A S S P L

 CGC CTA GTG GAG TGC GTT GCG AGC AAA GGT CGT CAC CGT CCG TGA CGA GCC GTT
 4977 4986 4995 5004 5013 5022
 GCG GAT CAC CTC ACG CAA CGC TCG TTT CCA GCA GTG GCA GGC ACT GCT CGG CAA

 A D H L T Q R S F P A V A G T A R Q
 R I T S R N A R F Q Q W Q A L L G N
 G S P H A T L V S S S G R H C S A T

 C C A C A R R H T G P S P L G G S R
 A V L A R A G T L E Q H H S D A R D
 R L L R V R A P S N R T I P T R G I

 GGC GTT GTT CGC GTG CGC GCG GCC ACT CAA GGA CCA CTA CCC TCA GGC GGG CTA
 5031 5040 5049 5058 5067 5076
 CCG CAA CAA GCG CAC GCG CGC CGG TGA GTT CCT GGT GAT GGG AGT CCG CCC GAT

 P Q Q A H A R R * V P G D G S P P D
 R N K R T R A G E F L V M G V R P I
 A T S A R A P V S S W * W E S A R S

 A R P P A R S A R V C A G R R R V A
 R E R H L V A P G Y A R E E V V S L
 E S A T S C P Q G T R V S R * S P C

 GAG CGA GCG CCA CCT CGT GCC GAC CGG GCA TGC GTG CGA GGA GAT GCT GCC TGT
 5085 5094 5103 5112 5121 5130
 CTC GCT CGC GGT GGA GCA CGG CTG GCC CGT ACG CAC GCT CCT CTA CGA CGG ACA

L A R G G A R L A R T H A P L R R T
 S L A V E H G W P V R T L L Y D G Q
 R S R W S T A G P Y A R S S T T D S
 P A T S T P A P A E E Y P A S P A S
 P L Q R L P R P L K K T R H P R L L
 R S S D F H A R S S R R V T R V S C
 CGC CCT CGA CAG CTT CAC CCG CGC CCT CGA AGA AGC ATG CCA CGC CTG CCT CGT
 5139 5148 5157 5166 5175 5184
 GCG GGA GCT GTC GAA GTG GGC GCG GGA GCT TCT TCG TAC GGT GCG GAC GGA GCA
 A G A V E V G A G A S S Y G A D G A
 R E L S K W A R E L L R T V R T E Q
 G S C R S G R G S F F V R C G R S R
 R S P G P G A S P A P P S S R P G A
 D R H G R V Q Q H L Q P L L V L G R
 I A I A G S R S I S S P S F F S A G
 CTA GCG CTA CCG GGG CCT GGA CGA CTA CCT CGA CCC CCT CTT CTT GCT CCG GGG
 5193 5202 5211 5220 5229 5238
 GAT CGC GAT GGC CCC GGA CCT GCT GAT GGA GCT GGG GGA GAA GAA CGA GGC CCC
 D R D G P G P A D G A G G E E R G P
 I A M A P D L L M E L G E K N E A P
 S R W P R T C * W S W G R R T R P R
 R P R R R P S A R R G R G S G P
 G L D D G D H L H G G V V E V P D R
 G S T T A T T S I G A S S R S R I G
 CGG GCT CCA GCA GCG GCA GCA CCT CTA CGG GCG GCT GCT GGA GCT GGC CTA GGG
 5247 5256 5265 5274 5283 5292
 GCC CGA GGT CGT CGC CGT GGA GAT GCC CGC CGA CGA CCT CGA CCG GAT CCC
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 P E V V A V V E M P A D D L D R I P
 P R S S P S W R C P P T T S T G S R
 G P P S G P R V T R G A S W D P S C
 D P L V E Q A Y Q E V P R G T R P V
 T R S S K R P T S N S R G V L G P F
 CCA GGC CCT CCT GAA GGA CCC GCA TGA CAA GCT GGC CGG CTG GTC AGG CCC CTT
 5301 5310 5319 5328 5337 5346
 GGT CCG GGA GGA CTT CCT GGG CGT ACT GTT CGA CCG GCC GAC CAG TCC GGG GAA
 G P G G L P G R T V R P A D Q S G E
 V R E D F L G V L F D R P T S P G N
 S G R T S W A Y C S T G R P V R G T
 R C C * E S P P H G P R A R A S R P
 D A A D N A R R I G Q A R V P Q D H
 M P L M M R E A S A R P A C P S I T
 GTA GCC GTC GTA GTA AGC GAG CCG CCT ACG GGA CCC GCG CGT GCC CGA CTA GCA

5355 5364 5373 5382 5391 5400
 CAT CGG CAG CAT CAT TCG CTC GGC GGA TGC CCT GGG CGC GCA CGG GCT GAT CGT

 H R Q H H S L G G C P G R A R A D R
 I G S I I R S A D A L G A H G L I V
 S A A S F A R R M P W A R T G * S W

 P A R R R R R G S I P G T S C R S
 R P V G G V D V V R F R D P R A G A
 A P C A A S T * S G F D T R D L V P

 CCG CCC CGT GCG GCG GCT GCA GAT GCT GGG CTT TAG CCA GGC CAG CTC GTG GCC
 5409 5418 5427 5436 5445 5454
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 G G A R R R R L R P E I G P V E H R
 A G H A A D V Y D P K S V R S S T G
 R G T P P T S T T R N R S G R A P A

 A T R G A R R G P A T V P R P S P S
 R Q E G Q G G D P H R * R A L H H V
 E S N E R G A T R T G D G P S T I S

 GAG CGA CAA GAG GGA CGG GCG GCA GGC CCA CGG CAG TGG CCC GCT CCA CTA CCT
 5463 5472 5481 5490 5499 5508
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 L A V L P A R R P G A V T G R G D G
 S L F S L P A V R V P S P G E V M D
 R C S P C P P S G C R H R A R * W T

 P P P G G P R R C A S R G P R Y P R
 P H L G A P G G A R R D D Q D T R V
 Q T S A R R A A P V G I T R T P V S

 GAC CCA CCT CCG GGC GGC CCG GCG GCC GTG CGG CTA GCA GGA CCA GCC ATG CCT
 5517 5526 5535 5544 5553 5562
 CTG GGT GGA GGC CCG CCG GGC CGC CGG CAC GCC GAT CGT CCT GGT CGG TAC GGA

 L G G G P P G R R H A D R P G R Y G
 W V E A R R A A G T P I V L V G T D
 G W R P A G P P A R R S S W S V R T

 A R R S R H T R S R S * G A S G A A
 L V A V A I H E V E V E G L R G Q Q
 S C P S Q S T N S K S K V W G V R S

 GCT CGT GCC GCT GAC GCT ACA CAA GCT GAA GCT GAA GTG GGT CGG CTG GGA CGA
 5571 5580 5589 5598 5607 5616
 CGA GCA CGG CGA CTG CGA TGT GTT CGA CTT CGA CTT CAC CCA GCC GAC CCT GCT

 R A R R L R C V R L R L H P A D P A
 E H G D C D V F D F D F T Q P A T L L
 S T A T A M C S T S T S P S R P C C

 S R C H S L R A * C R R A Y T T R S
 Q D A I L C G P E A V G P T R Q A V

S I P L S V A P S L L A Q R V N H S
 CGA CTA GCC GTT ACT CTG TCG GCC CGA GTC GTT GCG GAC CGC ATG CAA CAC GCT
 5625 5634 5643 5652 5661 5670
 GCT GAT CGG CAA TGA GAC AGC CGG GCT CAG CAA CGC CTG GCG TAC GTT GTG CGA
 A D R Q * D S R A Q Q R L A Y V V R
 L I G N E T A G L S N A W R T L C D
 * S A M R Q P G S A T P G V R C A T
 C P * C G S P R S R S S A S R P S R
 V R D A D R H G A G R A R Q V R R V
 * V T L M G I A P E A L E S F A A F
 GAT GTG CCA GTC GTA GGG CTA CCG GCC GAG GCG CTC GAG CGA CTT GCG CCG CTT
 5679 5688 5697 5706 5715 5724
 CTA CAC GGT CAG CAT CCC GAT GGC CGG CTC CGC GAG CTC GCT GAA CGC GGC GAA
 L H G Q H P D G R L R E L A E R G E
 Y T V S I P M A G S A S S L N A A N
 T R S A S R W P A P R A R * T R R T
 R S R S G R R L P V A A S * R F F R
 G R G R D E V F R Y P L P D A S S G
 A A V A I R * S A T R C R I L P L V
 GCG GCG CTG GCG CTA GGA GAT GCT TCG CCA TGC CGT CGC CTA GTC GCC TTC TTG
 5733 5742 5751 5760 5769 5778
 CGC CGC GAC CGC GAT CCT CTA CGA AGC GGT ACG GCA GCG GAT CAG CGG AAG AAC
 R R D R D P L R S G T A A D Q R K N
 A A T A I L Y E A V R Q R I S G R T
 P R P R S S T K R Y G S G S A E E P
 L L E R L L R P Y N Y R A R A R D Q
 C C S G S C G P T T T G P G R G T R
 A V V G Q A A P P L Q V Q G A G P G
 GCG TTG TTG AGG GAC TCG TCG GCC CCC ATC AAC ATG GAC CGG GCG CGG GCC AGG
 5787 5796 5805 5814 5823 5832
 CGC AAC AAC TCC CTG AGC AGC CGG GGG TAG TTG TAC CTG GCC CGC GCC CGG TCC
 R N N S L S S R G * (L) Y L A R A R S
 A T T P * A A G G S C T W P A P G P
 Q Q L P E Q P G V V V P G P R P V L
 I R G V I E A H R E F D G A L R G L
 S G G W S R R T G S S T A Q W V A W
 P D A G R D G R A A R L R R G S P G
 ACC TAG GCG GGG TGC TAG AGG CGC ACG GCG AGC TTC AGC GGA CGG TCT GCC GGG
 5841 5850 5859 5868 5877 5886
 TGG ATC CGC CCC ACG ATC TCC GCG TGC CGC TCG AAG TCG CCT GCC AGA CGG CCC
 W I R P T I S A C R S K S P A R R P
 G S A P R S P R A A R S R L P D G P
 D P P H D L R V P L E V A C Q T A Q

X6

T A A P D S G L T L A E V D G E Y V
 R P L P T R A W R * L R S T V R T C
 A H C R P G L G A D S G R R * G R V

 TCG CAC CGT CGC CCC AGG CTC GGG TCG CAG TCT CGG AGC TGC AGT GGG AGC ATG
 5895 5904 5913 5922 5931 5940
 AGC GTG GCA GCG GGG TCC GAG CCC AGC GTC AGA GCC TCG ACG TCA CCC TCG TAC

 S V A A G S E P S V R A S T S P S Y
 A W Q R G P S P A S E P R R H P R T
 R G S G V R A Q R Q S L D V T L V H

 S S M F E A E P P L V P L S G S A L
 P P C S N R K P R C C R C P A R R S
 R L V H I G S R A A A G A P L G V R

 TGC CTC CTG TAC TTA AGG CGA AGC CCG TCG TGG CCG TCC CTC GGG CTG CGC
 5949 5958 5967 5976 5985 5994
 ACG GAG GAC ATG AAT TCC GCT TCG GGC GGC AGC ACC GGC AGG GAG CCC GAC GCG

 T E D M N S A S G G S T G R E P D A
 R R T * I P L R A A A P A G S P T R
 G G H E F R F G R Q H R Q G A R R E

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 S V S S I R A V N S P V S A T S G L
 A F R A S G P * T A P C R P R A G *
 R F E H P G R E Q P R V G H E R A D

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 TGG TCG TGG CCG CAC TAC TGC CGG GCA GGG TAG AGC CAC TGC TGT ACA GGC TTG
 6057 6066 6075 6084 6093 6102
 ACC AGC ACC GGC GTG ATG ACG GCC CGT CCC ATC TCG GTG ACG ACA TGT CCG AAC

 T S T G V M T A R P I S V T T C P N
 P A P A * * R P V P S R * R H V R T
 Q H R R D D G P S H L G D D M S E R

 V P P Q V E V G S * G N R S G R L H
 C R R S S R S A A E A T G A G A S T
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 CCG TGG CCG CCG ACC TGG AGC TGC GGC GAA GTC GGC AAG GCC GAG GGC GCC TCC
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 GGC ACC GGC GGC TGG ACC TCG ACG CCG CTT CAG CCG TTC CGG CTC CCG CGG AGG

G T G G W T S T P L Q P F R L P R R
A P A A G P R R R F S R S G S R G G
H R R L D L D A A S A V P A P A E V

H G R L R P L D G R G V V A R L G S
I D E F G P C T E G D W W R G C V R
S T R S A P A P R G T G G G A S G

ACT ACA GGA GCT TCG GCC CCG TCC AGA GGG GCA GGG TGG TGG CGG GCG TCT GGG
6165 6174 6183 6192 6201 6210

TGA TGT CCT CGA AGC CGG GGC AGG TCT CCC CGT CCC ACC ACC GCC CGC AGA CCC

* C P R S R G R S P R P T T A R R P
D V L E A G A G L P V P P P P A D P
M S S K P G Q V S P S H H R P Q T R X 7

D A A A P G T Q R G G R G R H V A E

I R R L R A Q R A A E V V E I F P K
F G G C G P R D P P R W S R S S R S

CTT AGG CGG CGT CGG CCC GGA CAG ACC GCC GGA GGT GCT GGA GCT ACT TGC CGA
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GAA TCC GCC GCA GCC GGG CCT GTC TGG CGG CCT CCA CGA CCT CGA TGA ACG GCT

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6273 6282 6291 6300 6309 6318

TCC ACC GCC CCC AGT TGC TGC CGA TGT ACT GCA GCT CGT AGT CCC GCT CCG GAC

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P P P P V A A D V L Q L V V P L R T
H R P Q L L P M Y C S S * S R S G P

A G T S A T G A P A N R F L P L V R
L E R P H R V L Q P M G F C P F F E
S S G H I G Y W S P C E S V P S S S

GCT CGA GGG CAC CTA CGG CAT GGT CGA CCC CGT AAG GCT TTG TCC CCT TCT TGA
6327 6336 6345 6354 6363 6372

CGA GCT CCC GTG GAT GCC GTA CCA GCT GGG GCA TTC CGA AAC AGG GGA AGA ACT

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E L P W M P Y Q L G H S E T G E E L
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A G D P L P G T L K P Q L V L D S L
P G T P C P A R * S P S C S S T A S

GCC GGG GCA GCC CGT TCC CCG GGC AGT TGA ACC CGA CGT CCT GCT CCA GCG ACT

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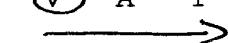
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 S A (V) A T P P K W P S E I D Y Q A P

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 L F Q P F V P S F V P S F V P S L I
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 G P D * P Q P R H R R D G C A R A A

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CTG	GGC	CGC	TCC	TGC	CGC	CTG	TCG	CGT	GCG	CCT	AGC	TTC	TGC	AGG	CGC	CAC	GCC	
7191	7200	7209	7218	7227	7236													
GAC	CCG	GCG	AGG	ACG	GCG	GAC	AGC	GCA	CGC	GGA	TCG	AAG	ACG	TCC	GCG	GTG	CGG	

D	P	A	R	T	A	D	S	A	R	G	S	K	T	S	A	V	R	
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P	A	R	C	R	V	A	R	R	R	*	A	S	G	C	G	A	P	
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TAC	CGC	GTG	CCG	TCG	CGT	GGC	GGG	AGG	CGG	CAG	TCC	GCG	AGG	GCG	TCG	GCC	GCC	
7245	7254	7263	7272	7281	7290													
ATG	GCG	CAC	GGC	AGC	GCA	CCG	CCC	TCC	GCC	GTC	AGG	CGC	TCC	CGC	AGC	CGG	CGG	

M	A	H	G	S	A	P	P	S	A	V	R	R	S	R	S	R	R	
W	R	T	A	A	H	R	P	P	P	S	G	A	P	A	A	G	G	
G	A	R	Q	R	T	A	L	R	R	Q	A	L	P	Q	P	A	G	

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P	R	R	P	R	W	I	P	P	S	A	S	V	S	A	R	S	V	
R	G	A	R	G	G	S	L	L	A	Q	R	F	A	R	E	A	*	

CGC	CGG	ACG	CGC	CGG	AGG	TCT	ATC	CTC	CCG	AAC	GGC	TTT	GCG	AGC	GAG	ACG	AGT	
7299	7308	7317	7326	7335	7344													
GCG	GCC	TGC	GCG	GCC	TCC	AGA	AGC	TAG	GAG	GGC	TTG	CCG	AAA	CGC	TCG	CTC	TGC	TCA

A	A	C	A	A	S	R	*	E	G	L	P	K	R	S	L	C	S	
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G	L	R	G	L	Q	I	G	G	L	A	E	T	L	A	L	L	T	

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G	N	S	S	A	R	P	*	G	P	R	R	S	C	P	S	I	R	
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GCG	GCA	AGC	TCG	AGC	GCG	CGC	CAG	TCG	GGC	CGG	CCG	CTC	TCG	TCC	CGC	TCT	AAG	
7353	7362	7371	7380	7389	7398													
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R	R	S	S	S	R	A	V	S	P	A	G	E	S	R	A	R	F	
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E	G	R	A	G	A	P	R	P	G	C	R	L	R	D	G	A	A	

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Y A S (V) Q G S G L V E S G G G D C G
T R V * R D V G W Y K P V A E T A A



Ra

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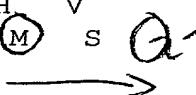
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 V * S Q R V G I G Y N R P L A P W T

 CTG GAT GCT AAC GGC GTG AGG CTA CGG CAT CAA CGC TCC TTC CCG CCC GGT ACA
 7893 7902 7911 7920 7929 7938
 GAC CTA CGA TTG CCG CAC TCC GAT GCC GTA GTT GCG AGG AAG GGC GGG CCA TGT

 D L R L P H S D A V V A R K G G P C
 T Y D C R T P M P * L R G R A G H V
 P T I A A L R C R S C E E G R A (M) S



H	E	R	P	E	*	G	S	C	T	Q	Q	H	G	S	P	R	A
M	N	G	P	N	E	A	P	V	R	R	S	T	V	P	P	A	P
W	T	G	P	T	R	L	R	F	V	D	A	P	S	R	L	P	P

GGT	ACA	AGG	GCC	CCA	AGA	GTC	GGC	CTT	GTG	CAG	ACG	ACC	ACT	GGC	CTC	CCC	GCC
7947	7956	7965	7974	7974	7983	7992											
CCA	TGT	TCC	CGG	GGT	TCT	CAG	CCG	GAA	CAC	GTC	TGC	TGG	TGA	CCG	GAG	GGG	CGG

P	C	S	R	G	S	Q	P	E	H	V	C	W	*	P	E	G	R
H	V	P	G	V	L	S	R	N	T	S	A	G	D	R	R	G	G
M	F	P	G	F	S	A	G	T	R	L	L	V	T	G	G	A	G

E	D	A	R	V	H	D	V	G	E	Q	L	G	P	G	L	D	G
K	M	P	E	C	T	T	S	A	K	R	S	A	P	A	S	T	V
S	*	R	S	A	R	P	R	R	R	G	P	P	R	P	R	P	*

CGA	AGT	AGC	CGA	GCG	TGC	ACC	AGC	TGC	GGA	AGG	ACC	TCC	GGC	CCC	GGC	TCC	AGT
8001	8010	8019	8028	8028	8037	8046											
GCT	TCA	TCG	GCT	CGC	ACG	TGG	TCG	ACG	CCT	TCC	TGG	AGG	CCG	GGG	CCG	AGG	TCA

A	S	S	A	R	T	W	S	T	P	S	W	R	P	G	P	R	S
L	H	R	L	A	R	G	R	R	L	P	G	G	R	G	R	G	H
F	I	G	S	H	V	V	D	A	F	L	E	A	G	A	E	V	T

H	Q	V	V	Q	G	G	T	V	R	F	T	Q	V	W	T	R	D
T	S	S	S	R	V	V	P	S	G	S	R	R	S	G	R	A	T
R	A	P	R	G	S	W	R	H	G	P	V	D	P	G	V	H	P

GGC	ACG	ACC	TGC	TGG	ACT	GGT	GGC	CAC	TGG	GCC	TTG	CAG	ACC	TGG	GTG	CAC	GCC
8055	8064	8073	8082	8082	8091	8100											
CCG	TGC	TGG	ACG	ACC	TGA	CCA	CCG	GTG	ACC	CGG	AAC	GTC	TGG	ACC	CAC	GTG	CGG

P	C	W	T	T	*	P	P	V	T	R	N	V	W	T	H	V	R
R	A	G	R	P	D	H	R	*	P	G	T	S	G	P	T	C	G
V	L	D	D	L	T	T	G	D	P	E	R	L	D	P	R	A	V

D	T	A	D	V	H	G	I	G	G	Q	V	L	G	H	P	R	
M	R	R	T	S	T	V	S	A	A	A	R	S	S	A	T	R	D
*	G	D	R	R	R	S	R	H	R	R	G	P	R	P	R	A	T

AGT	AGG	CAG	CGC	AGC	TGC	ACT	GGC	TAC	GGC	GGC	GGG	ACC	TGC	TCC	GGC	ACG	CCA
8109	8118	8127	8136	8136	8145	8154											
TCA	TCC	GTC	GCG	TCG	ACG	TGA	CCG	ATG	CCG	CCG	CCC	TGG	ACG	AGG	CCG	TGC	GGT

S	S	V	A	S	T	*	P	M	P	P	P	W	T	R	P	C	G
H	P	S	R	R	R	D	R	C	R	R	P	G	R	G	R	A	V
I	R	R	V	D	V	T	D	A	A	A	L	D	E	A	V	R	S

R	A	G	V	D	D	A	M	E	R	G	L	D	V	D	P	D	R
A	R	G	S	T	M	Q	W	R	A	A	W	I	S	T	R	T	E
P	A	G	R	R	*	R	G	D	R	P	G	S	R	R	G	P	R

GCC	GCG	CGG	GGC	TGC	AGT	AGA	CGG	TAG	AGC	GCC	GGG	TCT	AGC	TGC	AGG	CCC	AGA
8163	8172	8181	8190	8190	8199	8208											
CGG	CGC	GCG	CCG	ACG	TCA	TCT	GCC	ATC	TCG	CGG	CCC	AGA	TCG	ACG	TCC	GGG	TCT

R R A P T S S S A I S R P R S T S G S
 G A P R R H L P S R G P D R R P G L
 A R P D V I C H L A A Q I D V R V S
 H G C R G D V R P D V D L A R D V H
 T A V G A T S A R T L T S P V I L T
 P P W V P R R A P * R R P C S * R

 GCC ACC GGT GTG GCC GGC AGC TGC GCG CCC AGT TGC AGC TCC CGT GCT AGT TGC
 8217 8226 8235 8244 8253 8262
 CGG TGG CCA CAC CGG CCG TCG ACG CGC GGG TCA ACG TCG AGG GCA CGA TCA ACG

 R W P H R P S T R G S T S R A R S T
 G G H T G R R R A G Q R R G H D Q R
 V A T P A V D A R V N V E G T I N V
 Q F R R V G D P R P D H E G G G A P
 S S A A C A T P A R T T N A E V P P
 A P L P A R R R P A P R T R R W R R

 ACG ACC TTC GCC GCG TGC GGC AGC CCC GCG CCC AGC ACA AGC GGA GGT GGC CGC
 8271 8280 8289 8298 8307 8316
 TGC TGG AAG CGG CGC ACG CCG TCG GGG CGC GGG TCG TGT TCG CCT CCA CCG GCG

 C W K R R T P S G R G S C S P P P A
 A G S G A R R R G A G R V R L H R R
 L E A A H A V G A R V V F A S T G G
 R E V P F A N R D R R V L V R Q G P
 A S * P S P T G T G V F S S V S G L
 P A R R P L R E P G S S R P C A A W

 CCC GCG AGA TGC CCC TTC CGC AAG GCC AGG GCT GCT TGC TCC TGT GCG ACG GGT
 8325 8334 8343 8352 8361 8370
 GGG CGC TCT ACG GGG AAG GCG TTC CGG TCC CGA CGA ACG AGG ACA CGC TGC CCA

 G R S T G K A F R S R R T R T R C P
 G A L R G R R S G P D E R G H A A Q
 A L Y G E G V P V P T N E D T L P R
 R P R G V A R G L V A R L L V D A Q
 G P A G * P V A L Y Q A S F Y M P R
 A P P A R R C P W T S R P S T C R G

 CCG GCC CCC GCG GGA TGC CGT GCC GGT TCA TGA CGC GCC TCT TCA TGT AGC CGG
 8379 8388 8397 8406 8415 8424
 GGC CGG GGG CGC CCT ACG GCA CGG CCA AGT ACT GCG CGG AGA AGT ACA TCG GCC

 G R G R P T A R P S T A R R S T S A
 A G G A L R H G Q V L R G E V H R P
 P G A P Y G T A K Y C A E K Y I G L
 E V P Q V S G L V A H Q P E A V H V
 N L R S C P V S C L T N R S P L T Y
 T * G A A R F R A C R T A A R C R T

 ACA AGT TGG CCG ACG TGC CTT GGC TCG TGT CGC ACA ACG CCG AGC CGT TGC ACA

8433 8442 8451 8460 8469 8478
 TGT TCA ACC GGC TGC ACG GAA CCG AGC ACA GCG TGT TGC GGC TCG GCA ACG TGT
 C S T G C T E P S T A C C G S A T C
 V Q P A A R N R A Q R V A A R Q R V
 F N R L H G T E H S V L R L G N V Y
 P G P L A R A T L R A D D G D V A P
 P G R C L G P P S A P T M A M * Q P
 R A G A S G P R H P P R * R W R S R
 TGC CCG GGG CCG TCT CGG GCC CGC CAC TCC GCC CGC AGT AGC GGT AGA TGA CGC
 8487 8496 8505 8514 8523 8532
 ACG GGC CCC GGC AGA GCC CGG GCG GTG AGG CGG GCG TCA TCG CCA TCT ACT GCG
 T G P G R A R A V R R A S S P S T A
 R A P A E P G R * G G R H R H L L R
 G P R Q S P G G E A G V I A I Y C G
 Q G G L A S H G R H E A V T R L G T
 S A E S P P T G V T N P S P E C V R
 A P R R P R L A W P T R R R N A S G
 CCG ACC GGA GGC TCC CGC CTC ACG GGT GCC ACA AGC CGC TGC CAA GCG TCT GGG
 8541 8550 8559 8568 8577 8586
 GGC TGG CCT CCG AGG GCG GAG TGC CCA CGG TGT TCG GCG ACG GTT CGC AGA CCC
 G W P P R A E C P R C S A T V R R P
 A G L R G R S A H G V R R F A D P
 L A S E G G V P T V F G D G S Q T R
 V V H V D A V D G R R E D R R V A G
 S * T Y T P S T A A A A N T A G Y P V
 H S R T R R R R R P T R R A T R C
 CAC TGA TGC ACA TGC AGC CGC TGC AGC GGC GCC GCA AGC AGC GCG GCA TGC CGT
 8595 8604 8613 8622 8631 8640
 GTG ACT ACG TGT ACG TCG GCG ACG TCG CCG CGG CGT TCG TCG CGC CGT ACG GCA
 V T T C T S A T S P R R S S R R T A
 * L R V R R R R R R G V R R A V R H
 D Y V Y V G D V A A A F V A P Y G T
 D A R R R S C R V R A L P A R H Q L
 T P G A D P V D S V P L P L V T S S
 R R G P T Q F M P C P C P S C P A P
 GGC AGC CGG GCC GCA GAC CTT GTA GCC TGT GCC CGT TCC CCT CGT GCC ACG ACC
 8649 8658 8667 8676 8685 8694
 CCG TCG GCC CGG CGT CTG GAA CAT CGG ACA CGG GCA AGG GGA GCA CGG TGC TGG
 P S A R R L E H R T R A R G A R C W
 R R P G V W N I G H G Q G E H G A G
 V G P A S G T S D T G K G S T V L E
 D E V V D G G G P A V Q R G T E R
 T R S W M A A A E P R S R G G R K A

P G R G C R R R R A R G A E G N R
 TCC AGG AGC TGG TGT AGC GGC GGC GGA GGC CCG CGC TGG ACG GAG GGG CAA AGC
 8703 8712 8721 8730 8739 8748
 AGG TCC TCG ACC ACA TCG CCG CCT CCG GGC GCG ACC TGC CTC CCC GTT TCG
 R S S T T S P P P P G A T C L P V S
 G P R P H R R R L R A R P A S P F R
 V L D H I A A A S G R D L P P R F A
 G A P R A L D L V A G Q V D S T D G
 G R R G P S I W C L V R S T V R T A
 A G G A P R S G A C C G P R * E H R
 GCG GGG CGG CCG GCC CGC TCT AGG TCG TGT CGT GGG ACC TGC AGT GAG CAC AGC
 8757 8766 8775 8784 8793 8802
 CGC CCC GCC GGC CGG GCG AGA TCC AGC ACA GCA CCC TGG ACG TCA CTC GTG TCG
 R P A G R A R S S T A P W T S L V S
 A P P A G R D P A Q H P G R H S C R
 P R R P G E I Q H S T L D V T R V A
 G I Q A P G R G D R Q L F A D G G
 A S R P Q V A D T G S S F P M A A V
 R R D P S S R T R G A P S L C R R W
 GGC GGC TAG ACC CGA CCT GGC GCA GGC AGG GCG ACC TCT TTC CGT AGC GGC GGT
 8811 8820 8829 8838 8847 8856
 CCG CCG ATC TGG GCT GGA CCG CGT CCG TCC CGC TGG AGA AAG GCA TCG CCG CCA
 P P I W A G P R P S R W R K A S P P
 R R S G L D R V R P A G E R H R R H
 A D L G W T A S V P L E K G I A A T
 V G P D T G T R G D P L L C S * S A
 * A Q T R E P E G T R C C A H S V Q
 R R R P G N R N A R G A A P M V L K
 GGA TGC GGA CCC AGG CAA GGC CAA GCG GGC AGG CCG TCG TCC GTA CTG ATT GAA
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 CCT ACG CCT GGG TCC GTT CCG GTT CGC CCG TCC GGC AGC AGG CAT GAC TAA CTT
 P T P G S V P V R P S G S R H D * L
 L R L G P F R F A R P A A G M T N L
 Y A W V R S G S P V R Q Q A * L T C
 C A C C S D T A S A S R P P P G T C
 A P A A P T R P R R R D R H R G R V
 R L R L L G H G V G I A T A A G Y
 CGC GTC CGC GTC GTC CTC AGG CAC CGG CTG CGG CTA GCG CCA CCG CCG GGG CAT
 8919 8928 8937 8946 8955 8964
 GCG CAG GCG CAG CAG GAG TCC GTG GCC GAC GCC GAT CGC GGT GGC GGC CCC GTA
 A Q A Q Q E S V A D A D R G G G P V
 R R R S R S P W P T P I A V A A P Y
 A G A A G V R G R R R S R W R P R T

A S C C H H A A R S R R P A T G P *
 R L V A T T H L A V G A R H P A P D
 V C F L L P T C R S E P A T R H R T

 GTG CGT CTT GTC GTC ACC ACA CGT CGC GCT GAG GCC GCG CCA CGC CAC GGC CCA
 8973 8982 8991 9000 9009 9018
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 T Q N S S G V Q R D S G A V R C R V
 R R T A V V C S A T P A R C G A G S

 S R A S D R R R S T G D R R R V C G
 A G Q P T G G G V P A T A G G F A G
 L E K R L G A A S Q H R R A E S R V

 GTC GAG GAA CGC CTC AGG GCG GCG GCT GAC CAC GGC AGC GCG GAG GCT TGC GTG
 9027 9036 9045 9054 9063 9072
 CAG CTC CTT GCG GAG TCC CGC CGC CGA CTG GTG CCG TCG CGC CTC CGA ACG CAC

 Q L L A E S R R R L V P S R L R T H
 S S L R S P A A D W C R R A S E R T
 A P C G V P P P T G A V A P P N A P

 A L L G P A P P L P P H A P R P R C
 Q W Y A R R L L Y R L T L R G P D V
 R G T P G A C S T A S P S G A P T S

 GGA CGG TCA TCC GGG CCG CGT CCT CCA TCG CCT CCC ACT CGG CCG GCC CCA GCT
 9081 9090 9099 9108 9117 9126
 CCT GCC AGT AGG CCC GGC GCA GGA GGT AGC GGA GGG TGA GCC GGC CGG GGT CGA

 P A S R P G A G G S G G * A G R G R
 L P V G P A Q E V A E G E P A G V D
 C Q * A R R R R * R R V S R P G S T

 R P R G R A R A A P L E R A G A E K
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 E D A R H L L H G * R V A P Q R R H

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F I S A M K E V S S P D C R L T P V
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 S L D L D F T L G Q R R A F D A D V
 A * T W T S P S A R A A R S T P T S
 P E P G P R L H P G P P A R L R R R

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 G S G P G R R * G P G G A R S R R R
 A Q V Q V E G E A L A A R E V G V D
 G M C A G W I K I D G R D R H W G V
 A W A P A G S R S T G A T A T G A S
 R G H L R G L D Q H G R P R P A L R

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 R G G T A P R T G T R A A G G A L A
 E V E L P R G Q E P G Q P A E L S R
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 R D C G R V S W T R G P A S R P A S
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9459 9468 9477 9486 9495 9504
ACG GCG TCC ACG GCG GAG GCC TCC AGC CGC ACG TCG TCG TCC ACG AAC AGC ACG

T A S T A E A S S R T S S S T N S T
R R P R R R P P A A R R R P R T A R
G V H G G G L Q P H V V V H E Q H V

R D A W E R L V T N R S A S L G R T
G T P G N G C C R T V P R R C G E R
A P R G M G A A G H * P V G V A R A

ACG GCC AGC CGG GTA AGG GCG TCG TGG CAC AAT GCC CTG CGG CTG TCG GGA GCG
9513 9522 9531 9540 9549 9558

TGC CGG TCG GCC CAT TCC CGC AGC ACC GTG TTA CGG GAC GCC GAC AGC CCT CGC

C R S A H S R S T V L R D A D S P R
A G R P I P A A P C Y G T P T A L A
P V G P F P Q H R V T G R R Q P S R

A G L I R M T G G A E N V Q T A V K
P G W S G C R G G P R T * R P P S R
H G G P D A D D G R G R E G P H R G

CAC CGG GGG TCC TAG GCG TAG CAG GGG GGC CGG AGC AAG TGG ACC CAC CGC TGG
9567 9576 9585 9594 9603 9612

GTG GCC CCC AGG ATC CGC ATC GTC CCC CCG GCC TCG TTC ACC TGG GTG GCG ACC

V A P R I R I V P P A S F T W V A T
W P P G S A S S P R P R S P G W R P
G P Q D P H R P P G L V H L G G D L

E A E P T V P R D L L V V Y E D G N
R P R L H * R G T W C C S T N T V T
E R G * T D G A P G A A R R I R * R

AAG AGC CGG AGT CCA CAG TGG CCG GCC AGG TCG TCG TGC TGC ATA AGC AGT GGC
9621 9630 9639 9648 9657 9666

TTC TCG GCC TCA GGT GTC ACC GGC CGG TCC AGC AGC ACG TAT TCG TCA CCG

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L G L R C H R P V Q Q H D V F V T V

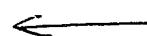
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* S T S T T G C I G A S T R W V S P
E V P R P Q A A S A P P R E G S P L

AAG TTG ACC AGC TCC AAC ACG GCG TCT ACG GCC GCC TGC AAG AGG TCT GCC TTC
9675 9684 9693 9702 9711 9720

TTC AAC TGG TCG AGG TTG TGC CGC AGA TGC CGG CGG ACG TTC TCC AGA CGG AAG

F N W S R L C R R C R R T F S R R K
S T G R G C A A D A G G R S P D G R
Q L V E V V P Q M P A D V L Q T E G

C V A V V (M) P R R G P T N R D A T E
V S R W W W Q V G G P P T G T R L R



GTZ

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 CGT GTC TGG CGG TGG TGG TAA CCT GCG GCG GGC CCC CAC AAG GCC AGG CGT CAG
 9729 9738 9747 9756 9765 9774
 GCA CAG ACC GCC ACC ACC ATT GGA CGC CGC CCG GGG GTG TTC CGG TCC GCA GTC
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 H R P P P L D A A R G C S G P Q S
 T D R H H H W T P P G G V P V R S L
 K K D V T V G T H S R E A P P P V R
 K R T W L * E L I A A N R R R P C E
 R E Q G C D S W Y P Q T G G A P A S
 AGA AAG AAC AGG TGT CAG TGA GGT CAT ACC GAC GCA AGG CGG CCG CCC CCG TGA
 9783 9792 9801 9810 9819 9828
 TCT TTC TTG TCC ACA GTC ACT CCA GTA TGG CTG CGT TCC GCC GGC GGG GGC ACT
 S F L S T V T P V W L R S A G G G T
 L S C P Q S L Q Y G C V P P A G A L
 F L V H S H S S M A A F R R R G H S
 S H * D D N M T R V A K * S I H * L
 R T D T T M * R V F Q K R L F T S F
 A L T L R * E D Y S S S E L F H A L
 GCG CTC ACA GTC AGC AGT AAG TAG CAT GCT TGA CGA AAG ATT CTT TAC ACG ATT
 9837 9846 9855 9864 9873 9882
 CGC GAG TGT CAG TCG TCA TTC ATC GTA CGA ACT GCT TTC TAA GAA ATG TGC TAA
 R E C Q S S F I V R T A F * E M C *
 A S V S R H S S Y E L L S K K C A K
 R V S V V I H R T N C F L R N V L K
 I P P E S R M P A T L R S A D A * W
 F R R S R G C Q R Q * D R L T P R G
 S D A A G V A N A S N T E F R R G V
 TCT TAG CCG CCG AGG CTG GCG TAA CCG CGA CAA TCA GAG CTT CGC AGC CGG ATG
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 AGA ATC GGC GGC TCC GAC CGC ATT GGC GCT GTT AGT CTC GAA GCG TCG GCC TAC
 R I G G S D R I G A V S L E A S A Y
 E S A A P T A L A L L V S K R R P T
 N R R L R P H W R C * S R S V G L P
 F S Q V P S P H Q F C P A E N P R I
 S R S S L H P I N S A P R R M R A F
 L V V P C T L S T P L L A G * E P S
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 R T F G Q V R D V G S R A P H S G E
 E R L D R * G M L E A G R L I R A N

V R H Q G I A A G D G E L L D V T S
 S G T S V * R P A T E R W S T S P P
 H G P A S R D R R R G G P P R R H

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 ATG ACC CGG TGC TGA CCT ATC GCG GCG CCG TCT CCC TCC AGG AGG TCG ACG GTG

 M T R C * P I A A P S P S R R S T V
 * P G A D L S R R R L P P G G R R W
 D P V L T Y R G A V S L Q E V D G G

 Y R G P S Y R K L F P V Q E K G L A
 I A G Q R I G K * S R C R N K G S P
 F L A R A F V K E P V A G T R E R P

 CTT ATC GCG GGA CCG CTT ATG GAA AAG TCC TTG CCG TGG ACA AGA AAG GGC TCC
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 E * R P G E Y L F R N G T C S F P R
 N S A L A N T F S G T A P V L S R G
 I A P W R I P F Q E R H L F F P E G

 A H S A G R H R P H P D S E P G V
 P T P R A A I G V P T R T V K R V S
 R R P V R R S A S P P A P * K G S R

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 P P E T A H V D V R V D G K P V A S
 E G Q H G V P L D V R A P D P C Q R
 R G R T V S R S T W V H R T P A S G
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 A G R Q T W * P A E S D C P L P A S
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 A P R W V H Y G A S E S Q G R G A L
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 D G V R F Q V A V T A V S S P S S R
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 S P T R N W T A T V A T E L G L D L
 G R Q R D P R A A V E L R E E R G Q
 V E S A I P A P Q * R W G S K A V R
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 L R D L P A D L I T C M V G M N I Y
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 R I M R S R C G E V G S T M A D W W
 G S * G P A V G R S G A P * R T G G G
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 TCC GGA TCA TCC GGG AGC GAC ACC CCT CGA CCC CGC TGG TCA TCG CGT CCC ACC
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 P D H P G A T P L D P A G H R V P P
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 V R G P V V R Q F S V A V Q G Q R L
 * E G Q C S G S S P S P * R D K V S

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 Y S P W H D P L E G D G Y L S L T E

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 V D V V D V A R A E G A G F G G V Q
 F T W * T W P G L R A P G S V A W R
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 Y T S G R Y V S G S C K L W S P C S
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 V R R A A V H R S A A L Q P G G A R
 Y V E P R Y T D P L H F N Q E G H D

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 G A P P R K G A S A R P A P A P G P

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 R D Q S G S E G R L A S R I * S G A
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 A V L T P G L S P Q G T A D L G T R
 R S * L P D S P R K A L R I * E P A

 V Y R T S P R I G R C R R H T R S A
 S T D P P H D S G E A D G I H G P L
 P R I P H I T P D R Q M A S T D P F

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 P V G E G N Q S G L K T G F D P E L
 P W A K A T S P A * R R D S T P S F

 G T D P G Y S G Q R H A R H G R A A
 A L I Q A M H A K V T R E T V G L L
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 R Q Y L G H M S L D G A L G D P E Q
 A S I W A I * A L T V R S V T P S S

 R R D * P Q L L R P E A P P L G P A
 A A I E R N S Y G H S L L L F V Q L
 R P S R V T P T A T A * C S S S R S

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A R R S H G W S S R G S A G G R P G
R G D L T V G V A V A Q Q E E D L E
A A I S R L E * P W L S R R K T W S
R P R L T F T G P Q A R G A L P V P
E R D S L L H V Q S L G E L W P F Q
S A T P S Y I Y R A S G K W G P S S

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G R P S I S R R W F * Q F R L R F I
D E H L F R D D G S D S S D C G S Y
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V L V E K S I V A R I T G I A A G I
S S W R N R S S P E S L E S Q P E Y
A F D P G R I L T H D K C A R L P *
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G K V W P P Y E R V V L A C P K R S
G V C R T D L R R L A G G S F * S S
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I R R I E Y Q G A E G R H H * T M K
S D A S S I K A P K G A T T E L * R
T L A I G G M R R I P G P C * E D Q
R S P S V V W A V F P D Q V N S M K
V H P R Y W G H S S H T R S M V * R

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 I M K D C R R G P Q P A K T G G A T
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 G A R F R P A D G A K T P R G H A G
 A Q G S V P R T V Q K P R G A M R A

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 R I E P N G A R L G Q R R P R H P Q
 E S R L I G L A Y A K A V L A T R N
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 S D L R I P S A * A L A T R A V R L

A G P L A G D D Q Q R P V R F R E M M K S V H Y E V G Q R
P V R F R E M M K S V H Y E V G Q R
P C G S A S W * R A S T T S S G R A

ACC CGT GGG CCT TCG CGA GGT AGT AGA ACG ACT GCA CCA TGA GCT GGG GGA CCG
12051 12060 12069 12078 12087 12096
TGG GCA CCC GGA AGC GCT CCA TCA TCT TGC TGA CGT GGT ACT CGA CCC CCT GGC

W A P G S A P S S C * R G T R P P G
G H P E A L H H L A D V V L D P L A
G T R K R S I I L L T W Y S T P W R

Q P L A Q Q R H L H H A * R R R H T
S L Y L K S A I C T T R E G A A I R
A S T S S A P S A P P A S V Q P S A

CCG ACT CCA TCT CGA ACG ACC GCT ACG TCC ACC ACG CGA GTG GAC GCC GCT ACG
12105 12114 12123 12132 12141 12150
GGC TGA GGT AGA GCT TGC TGG CGA TGC AGG TGG TGC GCT CAC CTG CGG CGA TGC

G * G R A C W R C R W C A H L R R C
A E V E L A G D A G G A L T C G D A
L R * S L L A M Q V V R S P A A M R

R H D Q R G P Q I L D H P R N E G P
E I I K A D L S S L T T P A T R V Q
N S S R P T W A P Y P R P P P E * R

CAA GCT ACT AGA ACC GCA GGT CCG ACC TAT TCC AGC ACC CCC GCC AAG AGT GGA
12159 12168 12177 12186 12195 12204
GTT CGA TGA TCT TGG CGT CCA GGC TGG ATA AGG TCG TGG GGG CGG TTC TCA CCT

V R * S W R P G W I R S W G R F S P
F D D L G V Q A G * G R G G G S H L
S M I L A S R L D K V V G A V L T W

V G Q P F L A S L H R S R R P P V L
Y E R P S S H Q S T D L A G P R S W
T S G P P L T S L P T S L A P A P G

CCA TGA GGG ACC CCC TTC TCA CGA CTC TCC ACA GCT CTC GCG GCC CCG CCC TGG
12213 12222 12231 12240 12249 12258
GGT ACT CCC TGG GGG AAG AGT GCT GAG AGG TGT CGA GAG CGC CGG GGC GGG ACC

G T P W G K S A E R C R E R R G G T
V L P G G R V L R G V E S A G A G P
Y S L G E E C * E V S R A P G R D Q

C R R S V G K Y G V S T * W C Y H V
A G A A S E K T G L V R E G A T T S
P V P P Q S R Q V W C E N V L L L P

TCC GTG GCC GCC GAC TGA GGA AAC ATG GGT TGT GAG CAA GTG GTC GTC ATC ACC
12267 12276 12285 12294 12303 12312
AGG CAC CGG CGG CTG ACT CCT TTG TAC CCA ACA CTC GTT CAC CAG CAG TAG TGG

R H R R L T P L Y P T L V H Q Q * W
 G T G G * L L C T Q H S F T S S S G
 A P A A D S F V P N T R S P A V V D

K T * T G T A T R P C Q T T R A F P
 K R E P A P R P E Q V N P Q E L L H
 S E N L H R D R N K S M P N N S C I

TGA AAG CAA GTC CAC GGC CAG CGC CAA GAA CCT GTA ACC CAA CAA GCT CGT TTA
 12321 12330 12339 12348 12357 12366

ACT TTC GTT CAG GTG CCG GTC GCG GTT CTT GGA CAT TGG GTT GTT CGA GCA AAT

T F V Q V P V A V L G H W V V R A N
 L S F R C R S R F L D I G L F E Q M
 F R S G A G R G S W T L G C S S K W

A P K P P R R G A S R V E R D H R D
 P P N R P G A A P Q G S K V I M A T
 P R T E P A Q P R S V P S * S * P P

CCC CGC CCA AAG CCC CCG GAC GCC GGC CGA CTG GCC TGA AGT GCT AGT ACC GCC
 12375 12384 12393 12402 12411 12420

GGG GCG GGT TTC GGG GGC CTG CGG CCG GCT GAC CGG ACT TCA CGA TCA TGG CGG

G A G F G G L R P A D R T S R S W R
 G R V S G A C G R L T G L H D H G G
 G G F R G P A A G * P D F T I M A V

A L P Q S P E T T S A S R P T V A A
 R L L S R R S P L Q P A G P H L P R
 G C S A A V A R Y N L R E P T Y R G

AGG CGT TCT CCG ACG CTG CCG AGC CAT CAA CTC CGC GAG GCC CCA CAT TGC CGG
 12429 12438 12447 12456 12465 12474

TCC GCA AGA GGC TGC GAC GGC TCG GTA GTT GAG GCG CTC CGG GGT GTA ACG GCC

S A R G C D G S V V E A L R G V T A
 P Q E A A T A R * L R R S G V * R P
 R K R L R R L G S * G A P G C N G R

D R A T A H G N R G R F R P Y C A D
 M G R Q P T G T G A A F G R T V P M
 C G A S H R A R E P R S V A P L L C

CGT AGG GCG CGA CAC CGC ACG GGC AAG GCC GGC GCT TTG GCG CCC ATT GTC CGT
 12483 12492 12501 12510 12519 12528

GCA TCC CGC GCT GTG GCG TGC CCG TTC CGG CCG CGA AAC CGC GGG TAA CAG GCA

A S R A V A C P F R P R N R G * Q A
 H P A L W R A R S G R E T A G N R H
 I P R C G V P V P A A K P R V T G I

P R G S F E R S T V R H Q R R V P G
 Q G A P F S A P R * A T N D A S P V
 R A P R F V R P V D R P T T P P R S

AGA CCG GCC GGC CTT TTG AGC GCC CTG CAG TGC GCC ACA ACA GCC GCC TGC CCT

12537 12546 12555 12564 12573 12582
TCT GGC CGG CCG GAA AAC TCG CGG GAC GTC ACG CGG TGT TGT CGG CGG ACG GGA

S G R P E N S R D V T R C C R R T G
L A G R K T R G T S R G V V G G R D
W P A G K L A G R H A V L S A D G T

S D H A G G V P S S I E K C T G T K
R I M P A A S L V L F K R V R A R R
G F * P R R R C S * F N G * V H G D

GGG CTT AGT ACC CGC GGC GGC TGT CCT GAT CTT TAA AGG AAT GTG CAC GGG CAG

12591 12600 12609 12618 12627 12636

CCC GAA TCA TGG GCG CCG ACA GGA CTA GAA ATT TCC TTA CAC GTG CCC GTC

P E S W A P P T G L E I S L H V P V
P N H G R R R Q D * K F P Y T C P S
R I M G A A D R T R N F L T R A R L

D E V G A F R H R P V L P S P M F I
I R S A Q S D T A H F S H L R C S F
* G R R R I Q P T S R T S V A H F

AAT AGG AGC TGC GGA CGC TTA GAC ACC GCA CCT TGC TCA CCT CTG CCG TAC TTT

12645 12654 12663 12672 12681 12690

TTA TCC TCG ACG CCT GCG AAT CTG TGG CGT GGA ACG AGT GGA GAC GGC ATG AAA

L S S T P A N L W R G T S G D G M K
Y P R R L R I C G V E R V E T A * K
I L D A C E S V A W N E W R R H E N

S T S C G V Q L R S V T R S P R P P
R H A A A S R Y G P Y P A P R A R R
D I H Q L R G T V Q I R H P V P A A

TAG CTA CAC GAC GTC GGC TGG ACA TTG GAC CTA TGC CAC GCC CTG CCC GCG CCG

12699 12708 12717 12726 12735 12744

ATC GAT GTG CTG CAG CCG ACC TGT AAC CTG GAT ACG GTG CGG GAC GGG CGC GGC

I D V L Q P T C N L D T V R D G R G
S M C C S R P V T W I R C G T G A A
R C A A A D L * P G Y G A G R A R R

I K V Q T G G S G M R S N L I S C R
F K * R P G G P A W G P I * Y A A G
S N E G P D G R L G D Q F E I H Q V

CCT TAA AAG TGG ACC CAG GGG GGC CTC GGG TAG GAC CTT AAG TTA TAC GAC GTG

12753 12762 12771 12780 12789 12798

GGA ATT TTC ACC TGG GTC CCC CCG GAG CCC ATC CTG GAA TTC AAT ATG CTG CAC

G I F T W V P P E P I L E F N M L H
E F S P G S P R S P S W N S I C C T
N F H L G P P G A H P G I Q Y A A P

Y G P F T R P R C * * G C K T S Y R
T G P F P A R G A N D G A S Q R T G

Q V R S L H A A Q M I V R V K D L V
 GAC ATG GGC CCT TTC CAC GCG CCG GAC GTA ATA GTG GGC GTG AAA CAG CTC ATG
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 CTG TAC CCG GGA AAG GTG CGC GGC CTG CAT TAT CAC CCG CAC TTT GTC GAG TAC
 L Y P G K V R G L H Y H P H F V E Y
 C T R E R C A A C I I T R T L S S T
 V P G K G A R P A L S P A L C R V P
 S N T S P E P T S I V L S S A S S G
 A T R R P S P R A S * W P R R R L G
 Q Q E D L A R A H Q D G L V V G F V
 GAC GAC AAG CAG CTC CCG AGC CCG CAC GAC TAG TGG TTC CTG CTG CGG CTT CTG
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 CTG CTG TTC GTC GAG GGC TCG GGC GTG CTG ATC ACC AAG GAC GAC GCC GAA GAC
 L L F V E G S G V L I T K D D A E D
 C C S S R A R A C * S P R T T P K T
 A V R R G L G R A D H Q G R R R R P
 L Q L S S N M W T E R P T Q V L V G
 W S C L P I * G R R A R P R C W S A
 G V A F L F E D V D R A P D A G P R
 GGG TTG ACG TTT CTC CTT AAG TAG GTG CAG AGC GCG CCC CAG ACG TGG TCC TGC
 12915 12924 12933 12942 12951 12960
 CCC AAC TGC AAA GAG GAA TTC ATC CAC GTC TCG CGC GGG GTC TGC ACC AGG ACG
 P N C K E E F I H V S R G V C T R T
 P T A K R N S S T S R A G S A P G R
 Q L Q R G I H P R L A R G L H Q D A
 A P T M C E T W A M E D R V N M A M
 P R P * A S R G R W R T G S T * R W
 R G P D H V G D V G D R G Q R E D G
 GGC CGG CCC CAG TAC GTG AGG CAG GTG CGG TAG AGC AGG GAC TGC AAG TAG CGG
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 CCG GCC GGG GTC ATG CAC TCC GTC CAC GCC ATC TCG TCC CTG ACG TTC ATC GCC
 P A G V M H S V H A I S S L T F I A
 R P G S C T P S T P S R P * R S S P
 G R G H A L R P R H L V P D V H R H
 S V L G Q S S H S G G S T * T S G S
 A * W A R P R I R D A A P E P R A A
 H E G L G P V F A I R R Q N L D L R
 TAC GAG TGG TTC GGG ACC CTG CTT ACG CTA GGC GGC GAC CAA GTC CAG CTC GGC
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 ATG CTC ACC AAG CCC TGG GAC GAA TGC GAT CCG CCG CTG GTT CAG GTC GAG CCG
 M L T K P W D E C D P P L V Q V E P
 C S P S P G T N A I R R W F R S S R
 A H Q A L G R M R S A A G S G R A A

G C V S S R G H P D G H D A G P P E
 A A C A P A G T L T A T T P A P P N
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 GAC GGC GTG TGC GAC CTC GCG GGC ACT CCC AGC GGC ACC AGC CGC GGC CCC CCA
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 L P H T L E R P * G S P W S A P G G
 C R T R W S A R E G R R G R R R R G V
 A A H A G A P (V) R V A V V G A G G F X11

 D A R G D G P C Q T G R G N G H R T
 T P V A T V R A S P E A A M G T V R
 R R C P R * G P V P N R P W E R S A

 AGC AGC CGT GCC GGC AGT GGG CCC GTG ACC CAA GGC GCC GGT AAG GGC ACT GCG
 13131 13140 13149 13158 13167 13176
 TCG TCG GCA CGG CCG TCA CCC GGG CAC TGG GTT CCG CGG CCA TTC CCG TGA CGC

 S S A R P S P G H W V P R P F P * R
 R R H G R H P G T G F R G H S R D A
 V G T A V T R A L G S A A I P V T R

 G V V L L C A T A A G E V H Q D V R
 A L * S S A R R L P G K S T S T L A
 H W S R P P V G Y R G R R R A P * R

 CAC GGT TGA TGC TCC TCC GTG CGG CAT CGC CGG GGA AGC TGC ACG ACC AGT TGC
 13185 13194 13203 13212 13221 13230
 GTG CCA ACT ACG AGG AGG CAC GCC GTA GCG GCC CCT TCG ACG TGC TGG TCA ACG

 V P T T R R H A V A A P S T C W S T
 C Q L R G G T P * R P L R R A G Q R
 A N Y E E A R R S G P F D V L V N A

 G A G G P T V P G P L V G V V V A A
 A Q G E R R * Q A R C C G S S S R R
 P R G R G A N S P G A A G R R R G G

 GCC GGA CGG GGA GGG CCG CAA TGA CCC GGG CCG TCG TGG GGC TGC TGC TGG CGG
 13239 13248 13257 13266 13275 13284
 CGG CCT GCC CCT CCC GGC GTT ACT GGG CCC GGC AGC ACC CCG ACG ACC GCC

 R P A P P G V T G P G S T P T T T A
 G L P L P A L L G P A A P R R R P P
 A C P S R R Y W A R Q H P D D D R R

 L R D V L G P R E K A V P L P V A E
 S V T S L V R A S R R S Q S H S R K
 R S P R C S G P A G E R S P T P G S

 CGC TCT GCC AGC TGT TCT GGG CCC GCG AGG AAG CGC TGA CCC TCA CCC TGG CGA
 13293 13302 13311 13320 13329 13338
 GCG AGA CGG TCG ACA AGA CCC GGG CGC TCC TTC GCG ACT GGG AGT GGG ACC GCT

A R R S T R P G R S F A T G S G T A
 R D G R Q D P G A P S R L G V G P L
 E T V D K T R A L L R D W E W D R F
 D L D A G D G R A G L Q V G G V A P
 T W I L V M E A R V W S S V G * P R
 R G S * C W R R A C G A P C G R R G

 AGC AGG TCT AGT CGT AGA GGC GCG CGT GGG TCG ACC TGT GGG GGA TGC CGG
 13347 13356 13365 13374 13383 13392
 TCG TCC AGA TCA GCA CCA TCT CCG CGC GCA CCC AGC TGG ACA CCC CCT ACG GCC

 S S R S A P S P R A P S W T P P T A
 R P D Q H H L R A H P A G H P L R P
 V Q I S T I S A R T Q L D T P Y G R
 V P G L G L L E A R A M Q D D A Q A
 F R A S A S S S Q A P W R T T R R P
 S G P R P R P A R R P G D P R G G P

 CCT TGG CCC GGC TCC GGC TCC TCG AGA CGC GCC CGG TAG ACC AGC AGG CGG ACC
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 G T G P R P R S S A R A I W S S A W
 E P G R G R G A L R G P S G R P P G
 N R A E A E E L C A G H L V V R L G
 G H V A V A V G L A N E D V D E F L
 G M Y P S L L V L P T R M S M R S S
 G W T R R C C C W P R E * R C G R L

 CGG GGT ACA TGC CGC TGT CGT TGT GGT TCC CGC AAG AGT AGC TGT AGG AGC TTC
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 P M Y G D S N T K G V L I D I L E E
 L G D V R V A L R A L A E R R D L P
 C G T * A C P S D R W L K A G T S H
 A A R R A R R T A G S S R A P R T

 TCG TCG GGC AGA TGC GCG TGC CGC TCA GCG CGG TCT CGA AGC GCG GCC AGC TCA
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 S S P S T R T A S R A R A S R R S S
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 Q P V Y A H G E S R Q S F A P V E W
 A A A P H G G V E V G L P Q P L H P
 H P P Q T A E W R S A S P S H S T P
 T R R S P P R G G R R R P A T P P P

 CCA CGC CGC CGA CCC ACC GGA GGG TGG AGC TGC GGC TCC CCG ACA CCC TCC ACC

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G A A A G W P P T S T P R G C G R W
 V R R L G G L P P R R R G A V G G G
 C G G W V A S H L D A E G L W E V G

R P R R D A Q P L D P V R D T R T G
 A R V V T L R R S I L S A T P E R E
 P A S S P * G A P S * P R P R N A N

CCC GCG CCT GCT GCC AGT CGG ACG CCC TCT AGT CCC TGC GCC AGC CAA GCG CAA

13617 13626 13635 13644 13653 13662

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 G A D D G Q P A G D Q G R G R F A F
 A R T T V S L R E I R D A V G S R S

D E G A G A L V V L E G Q D A F G V
 T K A P A R L S S W N G R T L S G S
 R R R R R G C P R G T G G P * R V R

GGC AGA AGC GGC CGC GGG CGT TCC TGC TGG TCA AGG GGG ACC AGT CGC TTG GGC

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 V F A G A R K D D Q F P L V S E P D

P R V G C I D D A P E P G T A S C Q
 Q G S A A S T M P Q S L A R L R A S
 S A P R R L H * R S A * P G Y G L V

TGA CCG GCC TGC GGC GTC TAC AGT AGC CGA CCG AGT CCC GGG CAT CGG CTC GTG

13725 13734 13743 13752 13761 13770

ACT GGC CGG ACG CCG CAG ATG TCA TCG GCT GGC TCA GGG CCC GTA GCC GAG CAC

T G R T P Q M S S A G S G P V A E H
 L A G R R R C H R L A Q G P * P S T
 W P D A A D V I G W L R A R S R A L

S S F * S C S R D S S R * R G N G S
 V P S D H A R G T V R G D D V T A P
 S Q L I M L V V P * E V T M S R Q R

ACT GAC CTC TTA GTA CTC GTG CTG GCC AGT GAG CTG GCA GTA GCT GGC AAC GGC

13779 13788 13797 13806 13815 13824

TGA CTG GAG AAT CAT GAG CAC GAC CGG TCA CTC GAC CGT CAT CGA CCG TTG CCG

* L E N H E H D R S L D R H R P L P
 D W R I (M) S T T G H S T V I D R C R
 T G E S * A R P V T R P S S T V A G

R R C C R T A A R A R G R V A P G *
 D A V V G L Q Q G H E V E S R L G E

G1

I Q S L V S N S G T S S R P G C A R

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 G A H E R P G A A L V H R V N R Q L
 V P T N G R V R P S S T G Y T G S S

 GTG GCC GCA CAA GGG CGC CTG GGC GCC GCT CCT GCA CGG CAT GCA AGG CGA CCT
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 W C A A R P A V A N W C S C A T P P

 S R G * T R R P S R S G T W G * G S
 V E A E H V A L A V A V P G A E V A
 S K P R M Y P S P * P * R D L R L R

 GCT GAA GCC GGA GTA CAT GCC GCT CCC GAT GCC GAT GGC CAG GTC GGA GTT GGC
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 T S A S C T A R A T A T G P A S T A

 W P P G G A R C P R R W * R G P R G
 G H R V V Q A A L D G G D G A Q D V
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 S M A D H L R G K V A A I T G L V D
 P W R T T C A A R S P P S P A W S T

R G R R G P R P C R C C R R C G A P
 E A G A V Q D H V D A A V V A G Q Q
 R P G P S R T T S M P L L S P V R S

 GGA GCC GGG GCC GCT GGA CCA GCA CCT GTA GCC GTC GTT GCT GCC GTG GGA CGA
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 S A P A T W S W T S A A T T A P C W

 P R G R R R A G G P R L P G R R W R
 R G V G G V P G A Q D S H V G G G G
 A A * G A S P G R R T P T S G A A V

 CCG CCG GAT GGG GCG GCT GCC CGG GGC GGA CCA GCC TCA CCT GGG GCG GCG GTG
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 A A Y P A D G P R L V G V D P A A T
 R P T P P T G P A W S E W T P P P P

 R R R T R G A P R R A S G R S R R M
 D E G R G V R R A D L Q D G V E E C
 T K A A D * G G P T S S I G S K K A

 GCA GAA GCG GCG CAG GAT GGG CGG CCC GCA GCT CGA CTA GGG GCT GAA GAA GCG
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 V F A A S Y P P G V E L I P D F F A
 S S P R P T R R A S S * S P T S S H

 R G A R R A G R W P R * R S R S T R
 V V Q E A P A A G L D D G R D R H E
 Y S R S P P R R A L T T V E I A I N

 TAT GCT GGA CGA GCC GCC CGC GGC GCG GTT CCA GCA GTG GAG CTA GCG CTA CAA
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 Y D L L G G R R A K V V T S I A M F
 T T C S A G A A P R S S P R S R C S

 R G A A D W P T * A P P R G G A S P
 V V Q R T G H L E H P L D A A Q Q R
 * S R G R G M S N M R S T P R R S V

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 Y D L P R P M E F M R E V G R L L T
 T T C R V P W S S C G R S A A C * R

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 V V A D P H G L L A I Q G R H E V G
 S S P M Q T V S C L * R G A I S W A

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 D G L H V L V L E A A V R G A R V D
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 A E V T S R G T T R V L A V C L L S
 H Q R Q Q G R G Q Q Q P V A G R A L
 T S G S S A A A R S S H C P V V P L
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 I I E P I T R P G E T S P R T A G P P
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 Q G F Q H D E G D P E F E A D Q C G
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 CGC CGC TGC TCG ACC TGC TCG ACC GCG CCG AGG CGC GCA CCG CGC CCG CCC GTA

R R C S T C S T A P R R R A P R P P V
A A A R P A R P R R G A H R A R P Y
P L L D L D R A E A R T A P A R T

F R T G D N A S S P A A F E A R S I
F A L E T T R Q R R H P S N Q G P F
L L S N R R E S V V T R R I R G P F

GTT TTC GCT CAA GGC AGC AAG CGA CTG CTG CCA CGC CGC TTA AGA CGG GCC CTT
16425 16434 16443 16452 16461 16470
CAA AAG CGA GTT CCG TCG TTC GCT GAC GAC GGT GCG GCG AAT TCT GCC CGG GAA

Q K R V P S F A D D G A A N S A R E
K S E F R R S L T T V R R I L P G K
K A S S V V R * R R C G E F C P G N

G S R T * T I G E L I G V F R Q S H
A P A P R P S E R L F V S L V S V I
H R L P D L H N G * S Y R C F A S *

TAC GGC CTC GCC CAG ATC CAC TAA GGG AGT TCT TAT GGC TGT TTT GCG ACT GAT
16479 16488 16497 16506 16515 16524
ATG CCG GAG CGG GTC TAG GTG ATT CCC TCA AGA ATA CCG ACA AAA CGC TGA CTA

M P E R V * V I P S R I P T K R * L
C R S G S R * F P Q E Y R Q N A D Y
A G A G L G D S L K N T D K T L T M

D D F S H L D T R A P D L L G S F L
I T L L I C I R A R R T W Y A Q F C
S R * F F A S G H A G P G T L R F V

ACT AGC AGT TTT CTT ACG TCT AGG CAC GCG CGG CCC AGG TCA TTC GGA CTT TTG
16533 16542 16551 16560 16569 16578
TGA TCG TCA AAA GAA TGC AGA TCC GTG CGC GCC GGG TCC AGT AAG CCT GAA AAC

* S S K E C R S V R A G S S K P E N
D R Q K N A D P C A P G P V S L K T
I V K R M Q I R A R R V Q * A * K Q

S T P Q H L Y G V Q V D T S E A D E
P P P N T C I A S R Y M P A R P T K
P L H T P A S L R G T C R H E R R R

TCC CTC CAC CCA ACC ACG TCT ATC GGC TGG ACA TGT AGC CAC GAG AGC CGC AGA
16587 16596 16605 16614 16623 16632
AGG GAG GTG GGT TGG TGC AGA TAG CCG ACC TGT ACA TCG GTG CTC TCG GCG TCT

R E V G W C R * P T C T S V L S A S
G R W V G A D S R P V H R C S R R L
G G G L V Q I A D L Y I G A L G V F

Y R R T H A D F P G H F A A E I R G
T G G H T L T S H A T S R P R * G A
R V A T H S R R I P R P V R G R D P

AGC ATG GCG GCA CAC ACT CGC AGC TTA CCC GGC ACC TTG CGC CGG AGA TAG GCC

16641 16650 16659 16668 16677 16686
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 S Y R R V * A S N G P W N A A S I R
 R T A V C E R R M G R G T R P L S G
 V P P C V S V E W A V E R G L Y P A
 F L G L C V L E A P D G Y G A V D G
 S S A S A C S S P P T A M A P S T G
 R L P R P V R A R R P R W L R R G

 GGC TTC TCC GGC TCC GTG TGC TCG AGC CGC CCC AGC GGT ATC GGC CGC TGC AGG
 16695 16704 16713 16722 16731 16740
 CCG AAG AGG CCG AGG CAC ACG AGC TCG GCG GGG TCG CCA TAG CCG GCG ACG TCC

 P K R P R H T S S A G S P * P A T S
 R R G R G T R A R R G R H S R R R P
 E E A E A H E L G G V A I A G D V P
 R R F H G Q P R R L L R H L P P A S
 G G S I A K R A A C C A T F L H P P
 G E P F P R A P P A A P P S S T P R

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 16749 16758 16767 16776 16785 16794
 CCC CTC CGG AAA TGG CCT TGC GGG CGG CGC AGC AGG CGG TGA AGA GGT GGG GCG

 P L R K W P C G R R S R R * R G G A
 P S G N G L A G G A A G G E E V G R
 P P E M A L R A A Q Q A V K R W G G
 R R R F E I Q Q Q I R A G P V L A R
 D G V S N S R S S Y A L V Q C W P G
 I A S P I R D A A T H S C R A G P G

 CTA GCG GCT GCC TTA AGC TAG ACG ACG ACA TAC GCT CGT GGA CCG TGG TCC CGG
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 I A D G I R S A A V C E H L A P G P
 S P T E F D L L Y A S T W H Q G P
 V A P R G L C V Q L P V Q H A P V H
 S P Q G G W A Y R C R C R T P P S M
 P R S A A G P M G A A A G P P R P C

 GCC TGC CGA CCG GCG GGG TCC GTA TGG ACG TCG CCG TGG ACC ACC CGC CCC TGT
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 G R L A A P G I P A A A P G G R G H
 D G W P P Q A Y L Q R H L V G G D M
 E G Q L D P L A A V A H E A R Q F E
 S A R S I L C P Q L P T N L A S S S

A R G P S * A P S C R R T * R A P V
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 A R P G D Q A G L Q R R V Q R A G T
 L A L E I R Q G C N G V F S A L E L
 G D A V Q L G I R V A G A R Q D D G
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 A V G Y L Q A D P N R T S A L I V A
 G V V V S R R Q D V P P P H A G A E
 A S L * P V G S I S R H R I P G P K
 R R C S R F A A S R G T A S P G R S
 GGC GGC TGT TGA TGC CTT GCG GCG ACT AGC TGG CCA CCG CCT ACC CGG GGC CGA
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 CCG CCG ACA ACT ACG GAA CGC CGC TGA TCG ACC GGT GGC GGA TGG GCC CCG GCT
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 R R Q L R N A A D R P V A D G P R L
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 D A A I R E R G P A A L P G A E G P
 M P P S A S G G Q H Q L R G P K A R
 * R R R H A G A R T S C A A R S R G
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 17073 17082 17091 17100 17109 17118
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 S S A A M R S R P G A A S G P A S P
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 I G G D A L P P W C C K R P G F A R
 E A R H G G L P Q R L D L R Q V A T
 S Q E T A E L P S G S I S D S C R P
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 CCG AGA CGA GCC ACC GGA GGT TCC CCG ACG GCC TCT AGC TCA GCG ACG TGG CGC
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 A L L G G L Q G A A G D R V A A P R
 L C S V A S K G L P E I E S L H R G

V L R Q E R R A D G P A T G G V E A
 S S G N N G G L M V R P R A V S K L
 H R A T T G A S C * G P G H W R S *

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 V T S R C S R R A S P G A V P P T S
 * R A V V P A E H H P G P C H R L Q
 D E P L F P P S I T R G R A T D F S

 G T D A L L E G G A A G G E N R H G
 A R I P W C N A V R L G A K T A I A
 R G Y R G A T R W G C G R R R Q S P

 CGC GGG CAT AGC CGG TCG TCA AGC GGT GGG CGT CGG GGC GGA AGC AAC GCT ACC
 17235 17244 17253 17262 17271 17280
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 R P Y R P A V R H P Q P R L R C D G
 A R I G Q Q F A T R S P A F V A M A

 L N L V M H H V H G L A G Q G P G A
 S I * S W I I S T A S R A R A P A P
 R S E P G Y S P R P R A R G P R P R

 GGC TCT AAG TCC TGG TAT ACT ACC TGC ACC GGC TCG CGC GGG ACC GGC CCC GGC
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 CCG AGA TTC AGG ACC ATA TGA TGG ACG TGG CCG AGC GCG CCC TGG CCG GGG CCG

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 R D S G P Y D G R G R A R P G R G R
 E I Q D H M M D V A E R A L A G A G

 D P H R V D G A D G E H V I V R L P
 M P I A S T A R T E K M F * * A F H
 C R S P P R R G R R R * S S D R S T

 CGT AGC CCT ACC GCC TGC AGC GGG CGC AGA GGA AGT ACT TGA TAG TGC GCT TCA
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 H R D G G R R P R L L H E L S R E V
 I G M A D V A R V S F M N Y H A K W

 R A T S F P P R P P A A T G T W T P
 D L L A S H R G P P H R Q G P G R P
 T S C H Q I A A Q P T G S D R D V H

 CCA GCT CGT CAC GAC TTA CCG CCG GAC CCC CCA CGG CGA CAG GGC CAG GTG CAC
 17397 17406 17415 17424 17433 17442
 GGT CGA GCA GTG CTG AAT GGC GGC CTG GGG GGT GCC GCT GTC CCG GTC CAC GTG

G R A V L N G G L G G A A V P V H V
V E Q C * M A A W G V P L S R S T W
S S S A E W R P G G C R C P G P R G

I R G P S R G S A P G A V M Q Q G H
F E A P L D A V Q P A L S W R S D M
S N P R S I P W K R P W R G D A T W

CCT TAA GCC GGC CCT CTA GCC GGT GAA CGC CCC GGT CGC TGG TAG ACG ACA GGT
17451 17460 17469 17478 17487 17496

GGA ATT CGG CCG GGA GAT CGG CCA CTT GCG GGG CCA GCG ACC ATC TGC TGT CCA

G I R P G D R P L A G P A T I C C P
E F G R E I G H L R G Q R P S A V H
N S A G R S A T C G A S D H L L S M

F V D Y P G T L E G G A V V D Q L E
S C M T R V P S S A G P S W T R C S
P V C R V S R H A R G R R G R G A V

ACC TTG TGT AGC ATG CCT GGC CAC TCG AGC GGG GGC CGC TGG TGC AGG ACG TTG
17505 17514 17523 17532 17541 17550

TGG AAC ACA TCG TAC GGA CCG GTG AGC TCG CCC CCG GCG ACC ACG TCC TGC AAC

W N T S Y G P V S S P P A T T S C N
G T H R T D R * A R P R R P R P A T
E H I V R T G E L A P G D H V L Q L

G R G R A Q H H G A G D K L N E F R
A V A G P R T T D L A T R * T R S D
R W P G P G P T W R R G E P E R I

AGC GGT GCC GGG GCC CGG ACC ACC ACA GGT CGC GGC AGG AAG TCC AAG AGC TTA
17559 17568 17577 17586 17595 17604

TCG CCA CGG CCC CGG GCC TGG TGG TGT CCA GCG CCG TCC TTC AGG TTC TCG AAT

S P R P R A W W C P A P S F R F S N
R H G P G P G G V Q R R P S G S R I
A T A P G L V V S S A V L Q V L E S

R V P V F S S Y R C R R V S Y A R S
G S Q S S H H I G A V V F P I H G H
A P S P R I I F V P L S S R F I G T

GCG GCC TGA CCC TGC TTA CTA CTT ATG GCC GTT GCT GCT TGC CTT ATA CGG GCA
17613 17622 17631 17640 17649 17658

CGC CGG ACT GGG ACG AAT GAT GAA TAC CGG CAA CGA CGA ACG GAA TAT GCC CGT

R R T G T N D E Y R Q R R T E Y A R
A G L G R (M) M N T G N D E R N M P V
P D W D E * * I P A T T N G I C P * M

I G Q D G P P S G R E P P R P R S R
Y G K I A R R V G E R R H G H D P D
I D R S R G A S E R E G T A T T P I

CTA TAG GGA ACT AGC GGG CCG CCT GAG GGA GAG AGG CCA CCG GCA CCA GCC CTA

M

17667 17676 17685 17694 17703 17712
 GAT ATC CCT TGA TCG CCC GGC GGA CTC CCT CTC TCC GGT GGC CGT GGT CGG GAT

 D I P * S P G G L P L S G G R G R D
 I S L D R P A D S L S P V A V V G I
 Y P L I A R R T P S L R W P W S G S
 I G T G R H H * S A R R I R P G T S
 S A P E G T T D V R G A F E P V Q Q
 P H R N G P P T L E G P S N Q S R N

 GCC TAC GGC CAA GGG GCC ACC ACA GTT GAG CGG GCC GCT TAA GAC CCT GGA CAA
 17721 17730 17739 17748 17757 17766
 CGG ATG CCG GTT CCC CGG TGG TGT CAA CTC GCC CGG CGA ATT CTG GGA CCT GTT

 R M P V P R W C Q L A R R I L G P V
 G C R F P G G V N S P G E F W D L L
 D A G S P V V S T R P A N S G T C *
 P R V C C R R R S A G R G S P L T G
 R G S A V G D A L H G G V A P F L V
 V A P R L V T P S I G G S R Q S S Y

 CTG CCG GCC TGC GTT GTG GCA GCC GCT CTA CGG GGG GCT GGC GAC CCT TCT CAT
 17775 17784 17793 17802 17811 17820
 GAC GGC CGG ACG CAA CAC CGT CGG CGA GAT GCC CCC CGA CCG CTG GGA AGA GTA

 D G R T Q H R R R D A P R P L G R V
 T A G R N T V G E M P P D R W E E Y
 R P D A T P S A R C P P T A G K S T
 P S R D A T R H P A A S P S E S R C
 P V E T R P E I R R Q P R R N A G A
 R S K P G R N S A A S R V A I R E P

 GGC CCT GAA GCC AGG CGC CAA GCT ACG CCG CGA CGC CTG CCG CTA AGC GAG GCC
 17829 17838 17847 17856 17865 17874
 CCG GGA CTT CGG TCC GCG GTT CGA TGC GGC GCT GCG GAC GGC GAT TCG CTC CGG

 P G L R S A V R C G A A D G D S L R
 R D F G P R F D A A L R T A I R S G
 G T S V R G S M R R C G R R F A P A
 N G P R R C L P N R R R T R R C R A
 T E Q V V V Y R T E V G L E E A D R
 L K R S S S M A P K S A S N K P M E

 GTC AAA GGA CCT GCT GCT GTA TCG CCC AAA GCT GCG GCT CAA GAA GCC GTA GAG
 17883 17892 17901 17910 17919 17928
 CAG TTT CCT GGA CGA CGA CAT AGC GGG TTT CGA CGC CGA GTT CTT CGG CAT CTC

 Q F P G R R H S G F R R R V L R H L
 S F L D D D I A G F D A E F F G I S
 V S W T T T * R V S T P S S S A S R
 A R P R A S P G A A A G S A P P P R
 R A L G L Q H V R L L A Q H Q L H G

G R S A S I S G C C R R I S S T A
 CGG CGC GCT CCG GCT CGA CTA CCT GGG CGT CGT CGC GGA CTA CGA CCT CCA CCG
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 GCC GCG CGA GGC CGA GCT GAT GGA CCC GCA GCA GCG CCT GAT GCT GGA GGT GGC
 A A R G R A D G P A A A P D A G G G
 P R E A E L M D P Q Q R L M L E V A
 R A R P S * W T R S S A * C W R W P
 A P V P A R P C G A A C G P L S R C
 P L C Q L V R A D R R V G Q C P G V
 Q C A S S C A P M G G C V R A P V S
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 17991 18000 18009 18018 18027 18036
 CTG GCA GGC ACT GGA GCA CGC GGG CAT CCC GCC GCA CAC CCT GGC AGG GAC CGA
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 W Q A L E H A G I P P H T L A G T D
 G R H W S T R A S R R T P W Q G P T
 R H T R R P R C R R S H R R V A P L
 G T H E G P D A G V V I A G S P Q F
 V P T N A P T Q V * S * P A P R S S
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 V Q R V D V C P R P D A R R H A G H
 S R G F M S A H V P I P A A T H A T
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 D L P N I D A W T G I G A A V C A V
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 W G R R E R A R G A R A W G R W R C
 G V A D R V R E V Q A P G A E G D V
 D L R T E * A S S R R P G L R E M S
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 G R A R G G Q H R Q V G G R L A Q P
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 T A C S A S L V A L H T A A Q S L R
 P R A R P P W W R C T P P R R A C G

 R R T C R P A P R P R * G A P T V P
 E A L A G H R Q G P A D V Q Q H * R
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 - A L R D G Q A R G A R Q R G V A P A
 P W V I A R P V A P A S A G S P R L

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 A R R S P W A R P A R W R P T A G A

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 L R E G R R G S A V G N G R R G V A
 L G N A A D A P R * A T A A D A S P

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 V R R H G P A P P A A R C R T * G P
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 R A C W R C * P G R R A P G P A R *
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 G R A H Q R H H G P L R A G P G A R
 D G R T N G I M A P C G Q A Q E H V
 T G A P T A S W P P A G R P R S T S
 S A R G S P R P R Q R C R Q S R R
 H P A G Q R G R A D S G V G N V E D
 M L R A R V A A P T A A S V T S K T

 GTA CTC CGC GCG GGA CTG CCG GCG CCC GCA GCG ACG GCT GTG GCA ACT GAA GCA
 18585 18594 18603 18612 18621 18630
 CAT GAG GCG CGC CCT GAC GGC CGC GGG CGT CGC TGC CGA CAC CGT TGA CTT CGT

 H E A R P D G R G R R C R H R * L R
 M R R A L T A A G V A A D T V D F V
 * G A P * R P R A S L P T P L T S S
 P G R C R Y G G R R G W P S R R S R
 L G V A G T G A E A V G H L D A R D
 S A W P V P V R R P S G M S I P A I

 GCT CCG GGT GCC GTG GCC ATG GGC GGA GCC GCT GGG GTA CCT CTA GCC GCG CTA
 18639 18648 18657 18666 18675 18684
 CGA GGC CCA CGG CAC CGG TAC CCG CCT CGG CGA CCC CAT GGA GAT CGG CGC GAT

 R G P R H R Y P P R R P H G D R R D
 E A H G T G T R L G D P M E I G A I
 R P T A P V P A S A T P W R S A R S
 R R R R V H G S R D P A T R P T P
 G G D V S T V A G T L L R A R D P R
 A A T * P R S R E P * S G H A T P D

 GCG GCG GCA GAT GCC TGC ACT GGC GAG GCC AGT CCT CGG CAC GCG CCA GCC CAG

18693 18702 18711 18720 18729 18738
 CGC CGC CGT CTA CGG ACG TGA CCG CTC CGG TCA GGA GCC GTG CGC GGT CGG GTC

 R R R L R T * P L R S G A V R G R V
 A A V Y G R D R S G Q E P C A V G S
 P P S T D V T A P V R S R A R S G R

 S T W C R A D P P R R P R R P * *
 H L G V D P M Q L P G G P D G P D D
 T F D L M P C R S P A A P T A P T M

 CCA CTT CAG GTT GTA GCC CGT AGA CCT CCC CCG GCG GCC CCA GCG GCC CCA GTA
 18747 18756 18765 18774 18783 18792
 GGT GAA GTC CAA CAT CGG GCA TCT GGA GGG GGC CGC CGG GGT CGC CGG GGT CAT

 G E V Q H R A S G G R R G R R G H
 V K S N I G H L E G A A G V A G V I
 * S P T S G I W R G P P G S P G S S

 P S G R G R R P G S G P W G A P R R
 L R D E G E V L V P D R G A Q Q V A
 L A I R A R S S S R I G A L R S S P

 GTT CCG CTA GGA GCG GGA GCT GCT CCT GGC CTA GGG CCG GTC GGA CGA CCT GCC
 18801 18810 18819 18828 18837 18846
 CAA GGC GAT CCT CGC CCT CGA CGA GGA CCG GAT CCC GGC CAG CCT GCT GGA CGG

 Q G D P R P R R G P D P G Q P A G R
 K A I L A L D E D R I P A S L L D G
 R R S S P S T R T G S R P A C W T A

 G S G R S R S P R G R C G A P S G P
 V R V G L D V P G A E V D P Q R G P
 S G F G S I S Q A P R S M R S A V R

 GCT GGG CTT GGG GCT CTA GCT GAC CCG GCC GGA GCT GTA GGC CGA CCG CTG GGC
 18855 18864 18873 18882 18891 18900
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 D P N P E I D W A G L D I R L A T R
 T R T P R S T G P A S T S G W R P G

 G A T A R A D A G G G P P Q T R N R
 G Q R P G L T R V G A P R S H G T E
 A R G H G S R G C G R R A A T D P K

 CCG GGA CGG CAC CGG GCT CGC AGG CGT GGG GGC GGC CCG CCG ACA CAG CCC AAA
 18909 18918 18927 18936 18945 18954
 GCC CCT GCC GTG GCC CGA GCG TCC GCA CCC CCG CCG GGC GGC TGT GTC CGG TTT

 G P A V A R A S A P P P G G C V R F
 A L P W P E R P H P R R A A V S G F
 P C R G P S V R T P A G R L C P V S
 S R R C R P G H P G R V P A W R A R
 A V A A G H G M H D E F L R G G R G

P * P P V T A W T T R S C A G V A G

 GCC GAT GCC GCC GTG GCA CCG GGT ACA CCA GGA GCT TGT CCG CGG GTG GCG CGG
 18963 18972 18981 18990 18999 19008
 CGG CTA CGG CGG CAC CGT GGC CCA TGT GGT CCT CGA ACA GGC GCC CAC CGC GCC

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 G Y G G T V A H V V L E Q A P T A P
 A T A A P W P M W S S N R R P P R P

 G G R A P A P R F G T G P T R P R G
 G A G R R L R G S G Q E R H G R G G
 A R G A G S G A P V R N G T D A A E

 GCG GGC GGG GCG CGG CCT CGG CCG GCC TTG GGA CAA GGG CCA CAG GCG CCG GAG
 19017 19026 19035 19044 19053 19062
 CGC CCG CCC CGC GCC GGA GCC GGC CGG AAC CCT GTT CCC GGT GTC CGC GGC CTC

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 A R P A P E P A G T L F P V S A A S
 P A P R R S R P E P C S R C P R P P

 P P A G H G R P R A R R A P R P P R
 R L R E T V A R G R E G L P D L L A
 G S A S R S R A A A S A S R T S S P

 GGG CCT CCG CGA GGC ACT GGC GCG CCG GCG GCT CGC CCA GCT CCT CCC
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 CCC GGA GGC GCT CCG TGA CCG CGC GGC CGC GCT CGC CGA GCG GGT CGA GGA GGG

 P G G A P * P R G R A R R A G R G G
 P E A L R D R A A A L A E R V E E G
 R R R S V T A R P R S P S G S R R A

 Q G P R P R A C G P G D A T G A P G
 S V Q G R D P V G Q G M P L G R Q D
 A S R A E T P C V R A W R C D G S T

 GCG ACT GGA CCG GAG CCA GCC CGT GTG GGA CCG GGT AGC CGT CAG GGG CGA CCA
 19125 19134 19143 19152 19161 19170
 CGC TGA CCT GGC CTC GGT CGG GCA CAC CCT GGC CCA TCG GCA GTC CCC GCT GGT

 R * P G L G R A H P G P S A V P A G
 A D L A S V G H T L A H R Q S P L V
 L T W P R S G T P W P I G S P R W S

 G P P R R P S R G P R V P R R A A R
 V P R G D H R G A P V F Q G G P Q A
 W R A A T T A V P R S S S A A P S R

 GGT GGC CCG CCG GCA GCA CCG CTG GCC GGC CCT GCT TGA CCG GCG GCC CGA CGC
 19179 19188 19197 19206 19215 19224
 CCA CCG GGC GGC CGT CGT GGC GAC CGG CCG GGA CGA ACT GGC CGC CGG GCT GCG

 P P G G R R G D R P G R T G R R A A
 H R A A V V A T G R D E L A A G L R
 T G R P S W R P A G T N W P P G C A

A P W E P V R A R D R * R P R A A P
 R Q G S L F G R G T E D G P G R Q R
 A S A V * S G A G P R T V P A A S G

 GCG CGA CCG GTG AGT CCT TGG GCG CGG GCC AGA GCA GTG GCC CCG GCG CGA CGG
 19233 19242 19251 19260 19269 19278
 CGC GCT GGC CAC TCA GGA ACC CGC GCC CGG TCT CGT CAC CGG GGC CGC GCT GCC

 R A G H S G T R A R S R H R G R A A
 A L A T Q E P A P G L V T G A A L P
 R W P L R N P R P V S S P G P R C R

 H R G D R R P T R P D R T G T P R S
 I G A T G D P H E R T V P G L P G P
 S A P R G T Q T N E P * P D W H A P

 CCT ACG GCC GGC AGG GCA GAC CCA CAA GAG CCC AGT GCC CAG GGT CAC CCG GCC
 19287 19296 19305 19314 19323 19332
 GGA TGC CGG CCG TCC CGT CTG GGT CTC GGG TCA CGG GTC CCA GTG GGC CGG

 G C R P S R L G V L G S R V P V G R
 D A G R P V W V F S G H G S Q W A G
 M P A V P S G C S R V T G P S G P G

 P G R V A P L R A P R R R P S R R V
 H A A F Q Q F G L R D E G L H D V F
 I P R S S S A S G T K A S T I S S

 CTA CCC GGC GCT TGA CGA CCT TCG GCT CGG CCA GAA GCG GCT CCA CTA GCT GCT
 19341 19350 19359 19368 19377 19386
 GAT GGG CCG CGA ACT GCT GGA AGC CGA GCC GGT CTT CGC CGA GGT GAT CGA CGA

 D G P R T A G S R A G L R R G D R R
 M G R E L L E A E P V F A E V I D E
 W A A N C W K P S R S S P R * S T N

 P A P T * P P S R T R A G A S A A P
 Q L R H E L L D P E R G P L H Q Q
 S S G T N L S S I P N E G R C I S S

 TGA CCT CGG CCA CAA GTT CCT CTA GCC CAA GAG CGG GGC CGT CTA CGA CGA
 19395 19404 19413 19422 19431 19440
 ACT GGA GCC GGT GTT CAA GGA GGA GAT CGG GTT CTC GCC CCG GCA GAT GCT GCT

 T G A G V Q G G D R V L A P A D A A
 L E P V F K E E I G F S P R Q M L L
 W S R C S R R R S G S R P G R C C W

 P R G C R P R R R G S W S R R S A A
 L A V V G L D V A G L G H D E R H L
 S P S W V S T S P A W V M I K A I C

 CCT CCC GCT GGT GTG GCT CCA GCT GCC GCG GGT CTG GTA CTA GAA GCG CTA CGT
 19449 19458 19467 19476 19485 19494
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G G R P H R G R R R P D H D L R D A
 E G D H T E V D G A Q T M I F A M Q
 R A T T P R S T A P R P * S S R C S

R A R R A T A T V P R R A R R R * R
 E P E G R Q P P * P A D L G G G D D
 S P S A A S H R D R P T S G A A T M

CGA GCC CGA GCG GCG CGA CAC CGC CAG TGC CCC GCA GCT CGG GCG GCG GCA GTA
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GCT CGG GCT CGC CGC GCT GTG GCG GTC ACG GGG CGT CGA GCC CGC CGC CGT CAT

A R A R R A V A V T G R R A R R R H
 L G L A A L W R S R G V E P A A V I
 S G S P R C G G H G A S S P P P S S

G S P R H S R R R * R R P A S R S
 A V R D T L D G G G D G G P R Q G H
 P W E T P S I A A A A T V A P A S V T

GCC GGT GAG CCA GCC ACT CTA GCG GCG GCG GCA GTG GCG GCC CCG CGA CTG GCA
 19557 19566 19575 19584 19593 19602

CGG CCA CTC GGT CGG TGA GAT CGC CGC CGC CGT CAC CGC CGG GGC GCT GAC CGT

R P L G R * D R R R R H R R G A D R
 G H S V G E I A A A V T A G A L T V
 A T R S V R S P P P S P P G R * P *

R R P G A S R G Y T A A A A R P R P
 G V P G P Q D A T P R Q Q Q A L G R
 V S P A R S I Q R L D S S S R S A A

CTG GCT GCC CCG GGC CGA CTA GAC GGC ATC CAG CGA CGA CGC GCT CCG GCG
 19611 19620 19629 19638 19647 19656

GAC CGA CGG GGC CCG GCT GAT CTG CCG TAG GTC GCT GCT GCG CGA GGC CGC

D R R G P A D L P * V A A A A A R G R
 T D G A R L I C R R S L L L R E A A A
 P T G P G * S A V G R C C C A R P R

A H R S P S P * D A R R R P R R A A
 P T A R H R H D T Q G E V L G G L P
 P R P A I A I T L R G K S S A A S R

CCC CGC ACC GCG CTA CCG CTA CCA GTC AGA CGG GAA GCT GCT CCG GCG GCT CGC
 19665 19674 19683 19692 19701 19710

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G A W R D G D G Q S A L R R G R R A
 G R G A M A M V S L P F D E A A E R
 G V A R W R W S V C P S T R P P S G

R P C H R P P R P W R T R S S T W R
 E R A I V R H D R G D R G R R R G G
 S A P L S A T T A A M A D E V V D V

CGA GCG CCC GTT ACT GCG CCA CCA GCG CCG GTA GCG CAG GAG CTG CTG CAG GTG

19719 19728 19737 19746 19755 19764
 GCT CGC GGG CAA TGA CGC GGT CGC GGC CAT CGC GTC CTC GAC GAC GTC CAC

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 L A G N D A V V A A I A S S T T S T
 S R A M T R W S R P S R P R R P P

 S R R H G R P R S P R R G S S R R
 H D G T V G A L D L L D D A A P G V
 T I E P S G P S T S F T T P R Q V S

 GCA CTA GAG GCC ACT GGG GCC GCT CCA GCT CTT CCA GCA GCC GGC GAC CTG GCT
 19773 19782 19791 19800 19809 19818
 CGT GAT CTC CGG TGA CCC CGG CGA GGT CGA GAA GGT CGT CGG CCG CTG GAC CGA

 R D L R * P R R G R E G R R P L D R
 V I S G D P G E V E K V V G R W T D
 * S P V T P A R S R R S S A A G P T

 P A P R V A P R R R P R G C G A C
 L P Q D Y P P D G G V H G E V A R V
 S P S T T R R T A E S T A K W L G C

 GCT CCC CGA CCA GCA TGC CGC CCA GCG GAG GCT GCA CCG GAA GGT GTC GGG CGT
 19827 19836 19845 19854 19863 19872
 CGA GGG GCT GGT CGT ACG GCG GGT CGC CTC CGA CGT GGC CTT CCA CAG CCC GCA

 R G A G R T A G R L R R G L P Q P A
 E G L V V R R V A S D V A F H S P H
 R G W S Y G G S P P T W P S T A R T

 P G G A R G A A R P R R R A S D W R
 H V G Q E V P Q A R G G V L Q T G A
 M S G R S S R S R A A A S S S L G L

 GTA CCT GGG GGA CGA GCT GGC CGA CGC GCG CCG GCG GCT GCT CGA CTC AGG GTC
 19881 19890 19899 19908 19917 19926
 CAT GGA CCC CCT GCT CGA CCG GCT GCG CGC GGC CGC CGA CGA GCT GAG TCC CAG

 H G P P A R P A A R G R R R A E S Q
 M D P L L D R L R A A A D E L S P S
 W T P C S T G C A R P P T S * V P A

 V A C A A R C S P A R P G A P W P S
 C R V R R E V R R R E R V R P G R H
 A G C V G S * V V A S A S G R A V T

 GCG TGG CGT GTG CGG CGA GAT GTG CTG CCG CGA GCG CCT GGG CGC CCG GTG CCA
 19935 19944 19953 19962 19971 19980
 CGC ACC GCA CAC GCC GCT CTA CAC GAC GGC GCT CGC GGA CCC GCG GGC CAC GGT

 R T A H A A L H D G A R G P A G H G
 A P H T P L Y T T A L A D P R A T V
 H R T R R S T R R R S R T R G P R *
 R R R R T S P P S G A C G P A A R R
 G G V A R V P R R V Q A V R H P E G

V A S P A Y Q A A F R R L G T R S A
 CTG GCG GCT GCC GCG CAT GAC CCG CCG CTT GGA CGC GTT GGG CCA CGC CGA GCG
 19989 19998 20007 20016 20025 20034
 GAC CGC CGA CGG CGC GTA CTG GGC GAA CCT GCG CAA CCC GGT GCG GCT CGC
 D R R R R V L G G E P A Q P G A A R
 T A D G A Y W A A N L R N P V R L A
 P P T A R T G R R T C A T R C G S P
 R S * R P P R P R G G P T R R A T G
 G R D G R R G L V A V P R E D L Q G
 A A I V A A A S S P W R A N T S S D
 GCG GCG CTA GTG GCG CCG CCG GCT CCT GCC GGT GGC CCG CAA GCA GCT CGA CAG
 20043 20052 20061 20070 20079 20088
 CGC CGC GAT CAC CGC GGC GGC CGA GGA CGG CCA CCG GGC GTT CGT CGA GCT GTC
 R R D H R G G R G R P P G V R R A V
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 A G R P R A S S G R S A P R V R R P
 R V G H D R V R D V L R Q G F A A H
 G C G T T A C E I W S V S A S R P T
 GGG CGT GGG GCA CCA GCG CGT GAG CTA GGT GCT CTG CGA CCG GCT TGC GCC GCA
 20097 20106 20115 20124 20133 20142
 CCC GCA CCC CGT GGT CGC GCA CTC GAT CCA CGA GAC GCT GGC CGA ACG CGG CGT
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 P H P V V A H S I H E T L A E R G V
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 P R T R R V S A V A C G A R P G S R
 L V H E D S R R * P A V L G L G P G
 S S T N T P G V S R R L W G S A R V
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 GGA GGA CGT GTT CGT CGG ACC GAC GCT ACG GCG CAA CCA GCC CGA GGC CCG GAC
 G G R V R R T D A T A Q P A R G P D
 E D V F V G P T L R R N Q P E A R T
 R T C S S D R R Y G A T S P R P G P
 G R R R P R R G S G R R S R P S T P
 E A G G H A G G V A V A H A H V P R
 K R A A T P A A W Q W P T L T S Q D
 GAA GGC GCG GCG GCA CCC GCG GCG GGT GAC GGT GCC GCA CTC GCA CCT GAC CAG
 20205 20214 20223 20232 20241 20250
 CTT CCG CGC CGC CGT GGG CGC CGC CCA CTG CCA CGG CGT GAG CGT GGA CTG GTC
 L P R R R G R R P L P R R E R G L V
 F R A A V G A A H C H G V S V D W S
 S A P P W A P P T A T A * A W T G R

A G A S R S G R L G A A R G R A A G
R E L R V P V E F D Q R G V G P L V
A S W G F P F R S T R G G * G Q C C

CCG CGA GGT CGG CTT GCC CTT GGA GCT TCA GGA CGG CGG GAT GGG GAC CGT CGT
20259 20268 20277 20286 20295 20304
GGC GCT CCA GCC GAA CGG GAA CCT CGA AGT CCT GCC GCC CTA CCC CTG GCA GCA

G A P A E R E P R S P A A L P L A A
A L Q P N G N L E V L P P Y P W Q H
R S S R T G T S K S C R P T P G S T

G A T A N W R R P A L P R A R G R R
A R Q P T G D G P R S R G L A A V V
R G S H R E M A P A R A A S R P W S

GGC GGG CGA CAC CGC AAG GTA GCG GCC CCG CGC TCG CCG GCT CGC GCC GGT GCT
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CCG CCC GCT GTG GCG TTC CAT CGC CGG GGC GCG AGC GGC CGA GCG CGG CCA CGA

P P A V A F H R R G A S G R A R P R
R P L W R S I A G A R A A E R G H D
A R C G V P S P G R E R P S A A T T

R S G C A A P C A R R R P C R G A
D V G V R Q Q A R G A A D R A A V Q
T S E W V S S P V G P P T A P L S R

GCA GCT GAG GGT GTG CGA CGA CCC GTG CGG GCC GCA GCG CCC GTC GCT GGA
20367 20376 20385 20394 20403 20412
CGT CGA CTC CCA CAC GCT GCT GGG CAC GCC CGG CGG CGT CGC GGG CAG CGA CCT

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V D S H T L L G T P G G V A G S D L
S T P T R C W A R P A A S R A A T C

A T A C C A P R R C G G T G P C G R
P Q P V A R Q V V V A A R V R A A V
R S H C L V S S S S L R G Y G P L W

CGC CGA CAC CGT GTC GTG CGA CCT GCT GCT GTC GGC GGG CAT GGG CCC GTC GGT
20421 20430 20439 20448 20457 20466
GCG GCT GTG GCA CAG CAC GCT GGA CGA CGA CAG CCG CCC GTA CCC GGG CAG CCA

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G C G T A R W T T T A A R T R A A T

G * R R P S R G P R R A P P * T G P
G E V A H L D D R G G H Q R D R E Q
A R L P T S I T G A A T S A T V N R

GCG GGA GTT GCC GCA CCT CTA GCA GGG CCG GCG GCA CGA CCG CCA GTG CAA GGA
20475 20484 20493 20502 20511 20520
CGC CCT CAA CGG CGT GGA GAT CGT CCC GGC CGC CGT GCT GGC GGT CAC GTT CCT

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 A A P A S P S S R R A R W S M V I V

 CCG CCG GCC GCG GCT CCC GCT TCT CGC GGC GCG GGA GGT CCT GTA CTG CTA CTG
 20529 20538 20547 20556 20565 20574
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 G G R R R G R R A P R P P G H D D D
 A A G A E G E E R R A L Q D M T M T
 R P A P R A K S A A P S R T * R * P

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 V R H Q R R T L P L D L D D A L A L
 W G T S V A P * R C I W T T R S P S

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 H P V L T A G Q R Q I Q V V R E G E
 T R C * R R V S G R S R S S A R A R

 P A A P R G S P R P R R R G S G R R
 H H P Q G G P R D R V G G V R V G G
 T T R S A E R V T A S A A S G F G A

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 V V R L A S R T V A D A A D P N P A
 W C G W P P G R S R T P P T R T P P

 A R G H R P G S P R A P G R R D P P
 P E D M G L G P R G R R V E G T Q R
 Q S T W A S A R V A A G S R A P R A

 GAC CGA GCA GGT ACG GCT CCG GGC CTG CCG GCG CGG CCT GGA GCG GCC AGA CCG
 20691 20700 20709 20718 20727 20736
 CTG GCT CGT CCA TGC CGA GGC CCG GAC GGC CGC GCC GGA CCT CGC CGG TCT GGC

 L A R P C R G P D G R A G P R R S G
 W L V H A E A R T A A P D L A G L A
 G S S M P R P G R P R R T S P V W R

 A T A A P G P R A G A R V P R G R G
 R P R Q Q V R A L V P E F R G V G A
 A R D S S S G P S C R S S G A S G P

 CCG CGC CAG CGA CGA CCT GGG CCC GCT CGT GGC CGA GCT TGG CCG GCT GGG GCC

20745 20754 20763 20772 20781 20790
 GGC GCG GTC GCT GGA CCC GGG CGA GCA CCG GCT CGA ACC GGC CGA CCC CGG

 G A V A A G P G R A P A R T G R P R
 A R S L L D P G E H R L E P A D P G
 R G R C W T R A S T G S N R P T P A
 P R G A A P R P P R V R S R N R N S
 Q D G P P Q G L H A Y G R G T E I P
 R T E R R S A S T P T G E V P K S Q

 GGA CCA GAG GGC CGC CGA CCG GCT CCA CCC GCA TGG GAG CTG GCC AAA GCT AAC
 20799 20808 20817 20826 20835 20844
 CCT GGT CTC CCG GCG GCT GGC CGA GGT GGG CGT ACC CTC GAC CGG TTT CGA TTG

 P G L P A A G R G G R T L D R F R L
 L V S R R L A E V G V P S T G F D W
 W S P G G W P R W A Y P R P V S I G
 R R A V T R R D R H V A R E P A R A
 A D L S Q G G T E T Y Q V S L H E R
 L T S R S D A P R P T S C A * T S E

 CTC GCA GCT CGC TGA CAG GCG GCC AGA ACA TGA CGT GCG AGT CCA CGA GAG
 20853 20862 20871 20880 20889 20898
 GAG CGT CGA GCG ACT GTC CGC CGG TCT CGG TGT ACT GCA CGC TCA GGT GCT CTC

 E R R A T V R R S R C T A R S G A L
 S V E R L S A G L G V L H A Q V L S
 A S S D C P P V S V Y C T L R C S R
 R R R T R P G A A P R R S T S R A P
 G V G R G P G R Q Q V G H H R D R R
 G S A E D Q A G S S S A T I D I A G

 CGG GCT GCG GAG CAG GAC CCG GGG CGA CGA CCT GCG GCA CTA CAG CTA GCG CGG
 20907 20916 20925 20934 20943 20952
 GCC CGA CGC CTC GTC CTG GGC CCC GCT GCT GGA CGC CGT GAT GTC GAT CGC GCC

 A R R L V L G P A A G R R D V D R A
 P D A S S W A P L L D A V M S I A P
 P T P R P G P R C W T P * C R S R R
 R R R P G G A A G C P R A R R R S *
 G G E H A E R L E A H D H V D V L D
 A A K T P R G C S R M T T C T S S I

 CCG GCG GAA GCA CCC GGA GGG CGT CGA GGC GTA CCA GCA CGT GCA GCT GCT CTA
 20961 20970 20979 20988 20997 21006
 GGC CGC CTT CGT GGG CCT CCC GCA GCT CCG CAT GGT CGT GCA CGT CGA CGA GAT

 G R L R G P P A A P H G R A R R R D
 A A F V G L P Q L R M V V H V D E I
 P P S W A S R S S A W S C T S T R S
 R R R C A V P P P S P R P R P R A R D G
 G D V A R W R L R R R D L D R E I G

V T S P V G G S A A V T S T A S S G

 GTG GCA GCT GCC GTG CGG TGG CCT CCG CCG CTG CCA GCT CCA GCG CGA GCT AGG
 21015 21024 21033 21042 21051 21060
 CAC CGT CGA CGG CAC GCC ACC GGA GGC GGC GAC GGT CGA GGT CGC GCT CGA TCC

 H R R R H A T G G G D G R G R A R S
 T V D G T P P E A A A T V E V A L D P
 P S T A R H R R R R S R S R S I P
 R R R C R A R G P * P R P P V G P P
 A D G V G H V G Q D R V P L S A R H
 R T A S V T C A R T V S P S P R G T

 GGC GCA GCG GCT GTG GCA CGT GCG GGA CCA GTG CCT GCC CCT CCC TGC GGG CCA
 21069 21078 21087 21096 21105 21114
 CCG CGT CGC CGA CAC CGT GCA CGC CCT GGT CAC GGA CGG GGA GGG ACG CCC GGT

 P R R R H R A R P G H G R G G T P G
 R V A D T V H A L V T D G E G R P V
 A S P T P C T P W S R T G R D A R W
 S G A R G A S G P P R A A P R A P C
 R A Q A A Q A V R H D L L R G R R V
 A L R R P R R * G T T S C G A A G S

 CCG CTC GGA CGC GCC GGA CGC GAT GGG CCA CCA GCT CGT CGG CCG GCG CGG CCT
 21123 21132 21141 21150 21159 21168
 GGC GAG CCT GCG CGG CCT GCG CTA CCC GGT GGT CGA GCA GCC GGC CGC GCC GGA

 G E P A R P A L P G G R A A G R A G
 A S L R G L R Y P V V E Q P A A P D
 R A C A A C A T R W S S S R P R R T
 R R A P R R R P R P R P T T T R P D T
 G V L R A A V R V R V H H R E R T Q
 V S S G P P S A S A S T T D N A P R

 GTG GCT GCT CGG CCC GCC GCT GCG CCT GCG CCT GCA CCA CAG CAA GCG CCC AGA
 21177 21186 21195 21204 21213 21222
 CAC CGA CGA GCC GGG CGG CGA CGC GGA CGT GGT GTC GTT CGC GGG TCT

 H R R A G R R R G R G R V V R G S
 T D E P G G D A D A D V V S F A G L
 P T S R A A T R T R T W C R S R V C
 A P P A A N G P A R R P A R A S R A
 R R L L Q T G P H E V L H A L L D R
 D G S S S R E R T S S S T R S C I A

 CAG CGG CCT CCT CGA CGC AAG GGC CCA CGA GCT GCT CCA CGC GCT CGT CTA GCG
 21231 21240 21249 21258 21267 21276
 GTC GCC GGA GGA GCT GCG TTC CCG GGT GCT CGA CGA GGT GCG CGA GCA GAT CGC

 V A G G A A F P G A R R G A R A D R
 S P E E L R S R V L D E V R E Q I A
 R R R S C V P G C S T R C A S R S R

P S A V R G W P G A R E G G A P P A
 L L H S E G G R G Q V N A A R Q H L
 C S I R S A G V A R C T R R G S T S

 CGT CCT CTA CGC TGA GCG GGG GTG CCG GGA CGT GCA AGC GGC GGG CGA CCA CCT
 21285 21294 21303 21312 21321 21330
 GCA GGA GAT GCG ACT CGC CCC CAC GGC CCT GCA CGT TCG CCG CCC GCT GGT GGA

 A G D A T R P H G P A R S P P A G G
 Q E M R L A P T A L H V R R P L V E
 R R C D S P P R P C T F A A R W W S

 P A R S P S S P P G G G A P S A G
 L P E V R H H R H H D A A A P Q L L A
 C P S S E T I V T T T R R R S S F R

 CGT CCC CGA GCT GAG CCA CTA CTG CCA CCA GGC GGC GGC CGA CCT CTT CGC
 21339 21348 21357 21366 21375 21384
 GCA GGG GCT CGA CTC GGT GAT GAC GGT GGT CCG CCG GCT GGA GAA GCG

 A G A R L G D D G G P P P A G E A
 Q G L D S V M T V V V R R R L E K R
 R G S T R * * R W W S A A G W R S A

 R G P R A P W C R R S A A W W * R C
 E A P V H R G V D E P L Q G G D A V
 R P R S T G A L M K Q F S G V M L S

 GGA GCC GGC CCT GCA CGG CCG GTT GTA GAA GAC CTT CGA CGG GTG GTA GTC GCT
 21393 21402 21411 21420 21429 21438
 CCT CGG CCG GGA CGT GCC GGC CAA CAT CTT CTG GAA GCT GCC CAC CAT CAG CGA

 P R P G R A G Q H L L E A A H H Q R
 L G R D V P A N I F W K L P T I S D
 S A G T C R P T S S G S C P P S A T

 R R D G S R V G * P V G S P P R G H
 D D I V Q G F A E R F V R R R V A M
 M T S * R V S R R V S C G V A S P W

 GTA GCA GCT AGT GGA CTG GCT TGC GGA GTG CCT TGT GGG CTG CCG CCT GCC GGT
 21447 21456 21465 21474 21483 21492
 CAT CGT CGA TCA CCT GAC CGA ACG CCT CAC GGA ACA CCC GAC GGC GGA CGG CCA

 H R R S P D R T P H G T P D G G R P
 I V D H L T E R L T E H P T A D G H
 S S I T * P N A S R N T R R R T A M

 T R F A S V G Y S M D A P S P P T F
 R G S R V S E T V * T L L P R R P S
 A D Q V C Q S R L E H * C P V A P H

 ACG CAG GAC TTG CGT GAC TGA GGC ATT GAG TAC AGT CGT CCC CTG CCG CCC CAC
 21501 21510 21519 21528 21537 21546
 TGC GTC CTG AAC GCA CTG ACT CCG TAA CTC ATG TCA GCA GGG GAC GGC GGG GTG

C V L N A L T P * L M S A G D G G V
A S * T H * L R N S C Q Q G T A G *
R P E R T D S V T H V S R G R R G E

P G R W G A R F G L S F R F F V G T
L A A G A P G S V * P F G S F C A L
F P R A L R G P F R P F V Q F V R W

TTT CCC GGC GCG GTC GGC CGG GCC TTT GGA TCC CTT TTG GAC TTT TTG TGC GGT
21555 21564 21573 21582 21591 21600
AAA GGG CCG CGC CAG CCG GCC CGG AAA CCT AGG GAA AAC CTG AAA AAC ACG CCA

K G P R Q P A R K P R E N L K N T P
K G R A S R P G N L G K T * K T R Q
R A A P A G P E T * G K P E K H A S

R D N N P P S M R H W R S N G Q F S
V I T T P R L C E I G D P T G K F R
Y S R Q Q A S V N S A M Q L E R S V

CAT GCT AGC AAC AAC CCG CCT CTG TAA GCT ACG GTA GAC CTC AAG GGA ACT TTG
21609 21618 21627 21636 21645 21654
GTA CGA TCG TTG TTG GGC GGA GAC ATT CGA TGC CAT CTG GAG TTC CCT TGA AAC

V R S L L G G D I R C H L E F P * N
Y D R C W A E T F D A I W S S L E T
T I V V G R R H S M P S G V P L K R

R I Q R R Q G C P T P Y S P A * I P
G S R V A S V A L H P I H L R E Y Q
V Q D S P A S R L T H S I F A S M N

CTG GAC TAG ACT GCC GCG ACT GGC GTT CCA CAC CCT ATA CTT CCG CGA GTA TAA
21663 21672 21681 21690 21699 21708
GAC CTG ATC TGA CGG CGC TGA CCG CAA GGT GTG GGA TAT GAA GGC GCT CAT ATT

D L I * R R * P Q G V G Y E G A H I
T * S D G A D R K V W D M K A L I L
P D L T A L T A R C G I * R R S Y W

P R P Q S S A A A S * A Y R P W V V
H A P N A R P Q P R N R M G R G F L
T P P T P E L S R G I V C V E A L C

CCA CCC GCC CCA ACC GAG CTC CGA CGC CGG CTA ATG CGT ATG GAG CCG GTT TGT
21717 21726 21735 21744 21753 21762
GGT GGG CGG GGT TGG CTC GAG GCT GCG GCC GAT TAC GCA TAC CTC GGC CAA ACA

G G R G W L E A A A D Y A Y L G Q T
V G G V G S R L R P I T H T S A K Q
W A G L A R G C G R L R I P R P N N

P G P P W Y F Q E R R H V P N W * P
Q D R H G I S S N E G I Y Q I G D L
S T G T A L L V T R E * T S S E M L

TGA CCA GGG CCA CCG GTT ATC TTG ACA AGA GAG GAT ACA TGA CCT AAG GTA GTT

21771	21780	21789	21798	21807	21816
ACT GGT CCC GGT	GGC CAA TAG AAC	TGT TCT CTC CTA	TGT ACT GGA	TTC CAT CAA	
T G P G G Q *	N C S L L C T G F H Q				
L V P V A N R T	V L S Y V L D S I K				
W S R W P I E L F	S P M Y W I P S R				
P R F I P P R S Q R R P S R P P S G					
L G S Y R L D P N D D P R G R R L D					
S A P I D S T P I T T P A V A A S I					
CCT CCG GCC TTA TAG CCT CCA GCC CTA ACA GCA GCC CCG CTG GCG CCG CCT CTA					
21825 21834 21843 21852 21861 21870					
GGA GGC CGG AAT ATC GGA GGT CGG GAT TGT CGT CGG GGC GAC CGC GGC GGA GAT					
G G R N I G G R D C R R G D R G G D					
E A G I S E V G I V V G A T A A E I					
R P E Y R R S G L S S G R P R R R S					
P K R P L R R P T R G P R * R C G A					
L S G H S V A R L E A Q V D G V D L					
W A E T P S P A S N P R S T V * M W					
GGT CCG AAG GCA CCC TCT GCC GCG CCT CAA GCC GGA CCT GCA GTG GAT GTA GGT					
21879 21888 21897 21906 21915 21924					
CCA GGC TTC CGT GGG AGA CGG CGC GGA GTT CGG CCT GGA CGT CAC CTA CAT CCA					
P G F R G R R G V R P G R H L H P					
Q A S V G D G A E F G L D V T Y I Q					
R L P W E T A R S S A W T S P T S S					
P R G A R A P R R R A R T G H S G R					
L V G R A P Q G V G H E H G T V E E					
C S A G R P S A S A T S T D R S K R					
CGT CCT GCG GGG CGC GCC CGA CCG GCT GCG GCA CGA GCA CAG GGC ACT GAA GGA					
21933 21942 21951 21960 21969 21978					
GCA GGA CGC CCC GCG CGG GCT GGC CGA CGC CGT GCT CGT GTC CCG TGA CTT CCT					
A G R P A R A G R R R A R V P * L P					
Q D A P R G L A D A V L V S R D F L					
R T P R A G W P T P C S C P V T S S					
R R R S R * T G P R C S R R P R C R					
A V V V E D H V Q A V V V D H V A D					
P S S S K T M Y R P S L * T T S P M					
GCC GCT GCT GCT GAA GCA GTA CAT GGA CCC GCT GTT GAT GCA GCA CCT GCC GTA					
21987 21996 22005 22014 22023 22032					
CGG CGA CGA CGA CTT CGT CAT GTA CCT GGG CGA CAA CTA CGT CGT GGA CGG CAT					
R R R R R L R H V P G R Q L R R G R H					
G D D D F V M Y L G D N Y V V D G I					
A T T T S S C T W A T T T S W T A S					
R S R P P S G G R C A R R A P * A R					
D V E H R V E A A V L G G R L D H E					

T S K T A S K R R S L G A A C T M S

 GCA GCT GAA GCA CCG CCT GAA GGC GGC GCT GTT CGG GCG GCG CGT CCA GTA CGA
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 CGT CGA CTT CGT GGC GGA CTT CCG CCG CGA CAA GCC CGC CGC GCA GGT CAT GCT

 R R L R G G L P P R Q A R R A G H A
 V D F V A D F R R D K P A A Q V M L
 S T S W R T S A A T S P P R R S C S

 G P R R G A C T R R P R V Q R S R G
 G P D G V R A P E A H G F K V L V A
 A R T A S G R L N P T A S S S S F P

 GCG GGC CCA GCG GCT GGG CGC GTC CAA GCC GCA CCG GCT TGA ACT GCT CTT GCC
 22095 22104 22113 22122 22131 22140
 CGC CCG GGT CGC CGA CCC GCG CAG GTT CGG CGT GGC CGA ACT TGA CGA GAA CGG

 R P G R R P A Q V R R G R T * R E R
 A R V A D P R R F G V A E L D E N G
 P G S P T R A G S A W P N L T R T A

 P S R P R P S A G P G W S R G P S R
 P H G R D H L L G L V G P A V Q R D
 R T V A T T S F G W S G L L S R A I

 GGC CCA CTG GCG CCA GCA CCT CTT CGG GGT CCT GGG GTC CTC GCT GGA CCG CTA
 22149 22158 22167 22176 22185 22194
 CCG GGT GAC CGC GGT CGT GGA GAA GCC CCA GGA CCC CAG GAG CGA CCT GGC GAT

 P G D R G R G E A P G P Q E R P G D
 R V T A V V E K P Q D P R S D L A I
 G * P R S W R S P R T P G A T W R S

 R R T R R * S P R A R P R P R C G A
 D A H V G E A R G H V L G H G A D P
 T P T Y A K L E A T C S A T A P M R

 GCA GCC GCA CAT GCG GAA GTC GAG CCG GCA CGT GCT CCG GCA CCG GCC GTA GGC
 22203 22212 22221 22230 22239 22248
 CGT CGG CGT GTA CGC CTT CAG CTC GGC CGT GCA CGA GGC CGT GGC CGG CAT CCG

 R R R V R L Q L G R A R G R G R H P
 V G V Y A F S S A V H E A V A G I R
 S A C T P S A R P C T R P W P A S G

 T R A S R A P S * R R G A T A P R G
 R G P P V L Q L D G V G Q L P Q G V
 G D Q R F S S S I V S A R C H S A S

 CGG CAG GAC CGC CTT GCT CGA CCT CTA GTG GCT GCG GGA CGT CAC CGA CCG GCT
 22257 22266 22275 22284 22293 22302
 GCC GTC CTG GCG GAA CGA GCT GGA GAT CAC CGA CGC CCT GCA GTG GCT GGC CGA

 A V L A E R A G D H R R P A V A G R
 P S W R N E L E I T D A L Q W L A D
 R P G G T S W R S P T P C S G W P T

R A R P R S W P S R G T S S P R R S
 V P V L D A G R H D V P V P L V D R
 W P C S T P E V T I S R Y Q F S T A

 GGT GCC CGT GCT CCA GCC GAG GTG CCA CTA GCT GGC CAT GAC CTT CCT GCA GCG
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 CCA CGG GCA CGA GGT CGG CTC CAC GGT GAT CGA CCG GTA CTG GAA GGA CGT CGC

 P R A R G R L H G D R P V L E G R R
 H G H E V G S T V I D R Y W K D V A
 T G T R S A P R * S T G T G R T S R

 R * R R G P S S G A G A P T G P S G
 A D G V D Q L H V P V Q Q L G Q L G
 L T V S T R S I F R C R S S D R S V

 CTC GCA GTG GCT GCA GGA CCT CTA CTT GGC CGT GGA CGA CCT CAG GGA CCT CTG
 22365 22374 22383 22392 22401 22410
 GAG CGT CAC CGA CGT CCT GGA GAT GAA CCG GCA CCT GCT GGA GTC CCT GGA GAC

 E R H R R P G D E P A P A G V P G D
 S V T D V L E M N R H L L E S L E T
 A S P T S W R * T G T C W S P W R P

 C R R R P P R P W R V P P G L R P P
 A D V A L H V L G A F Q H A S D H H
 R M S P S T S S A L S S T P R T T T

 GGC GTA GCT GCC GCT CCA CCT GCT CCG GTC GCT TGA CCA CCC GGC TCA GCA CCA
 22419 22428 22437 22446 22455 22464
 CCG CAT CGA CGG CGA GGT GGA CGA GGC CAG CGA ACT GGT GGG CCG AGT CGT GGT

 P H R R R G G R G Q R T G G P S R G
 R I D G E V D E A S E L V G R V V V
 A S T A R W T R P A N W W A E S W W

 P P P S S R R S G C R R D R R * R G
 L R P R L D G A G A D D T G G D D A
 S A P A F I E P E R M T P G A T M P

 CCT CCG CCC CCG CTT CTA GAG GCC GAG GGC GTA GCA GCC AGG GCG GCA GTA GCC
 22473 22482 22491 22500 22509 22518
 GGA GGC GGG GGC GAA GAT CTC CGG CTC CCG CAT CGT CGG TCC CGC CGT CAT CGG

 G G G G E D L R L P H R R S R R H R
 E A G A K I S G S R I V G P A V I G
 R R G R R S P A P A S S V P P S S A

 P C P P A P S R G R D R * R W R P C
 R V R H H L V G V E T G E G G D L A
 G S V T T C S E * R P G K V E M S P

 GGG CCT GTG CCA CCA CGT CCT GAG GAT GGA GCC AGG GAA GTG GAG GTA GCT CCC
 22527 22536 22545 22554 22563 22572
 CCC GGA CAC GGT GGT GCA GGA CTC CTA CCT CGG TCC CTT CAC CTC CAT CGA GGG

P G H G A G L L P R S L H L H R G
 P D T V V Q D S Y L G P F T S I E G
 R T R W C R T P T S V P S P P S R A
 S G P R A C R S G T S S R A A H R K
 V A P D R V A L D L V R D H Q T A S
 L Q R T A C L S I W Y E I T S R P A

 GTT GAC GGC CCA GCG CGT GTC GCT CTA GGT CAT GAG CTA GCA CGA CGC ACC GCG
 22581 22590 22599 22608 22617 22626
 CAA CTG CCG GGT CGC GCA CAG CGA GAT CCA GTA CTC GAT CGT GCT GCG TGG CGC

 Q L P G R A Q R D P V L D R A A W R
 N C R V A H S E I Q Y S I V L R G A
 T A G S R T A R S S T R S C C V A L
 S R P L R G H R P S P S R G P S R P
 R D L S D G T D L V R H D A P L G L
 E I S P T A R T S S E T I P R S V S

 AAG CTA GCT CCC TCA GCG GGC ACA GCT CCT GAG CCA CTA GCC GGC CCT CTG GCT
 22635 22644 22653 22662 22671 22680
 TTC GAT CGA GGG AGT CGC CCG TGT CGA GGA CTC GGT GAT CGG CCG GGA GAC CGA

 F D R G S R P C R G L G D R P G D R
 S I E G V A R V E D S V I G R E T E
 R S R E S P V S R T R * S A G R P R
 S R R G G S T S R A G A P A P L G C
 H V G G G P R R G R V P Q H Q S V V
 T F A A G R V D V A C R S T S P S W

 CCA CTT GCG GCG GGG GGC CTG CAG CTG GCG CGT GGC CGA CCA CGA CCC TCT GGT
 22689 22698 22707 22716 22725 22734
 GGT GAA CGC CGC CCC CCG GAC GTC GAC CGC GCA CCG GCT GGT GCT GGG AGA CCA

 G E R R P P D V D R A P A G A G R P
 V N A A P R T S T A H R L V L G D H
 * T P P G R R P R T G W C W E T T
 G P G P R R N F L G A S A P S A V T
 A P D L D A T S C A Q P P P P R S P
 L R T W T P P Q V P R R L R P V R R

 GTC GGC CCA GGT CCA GCC GCG AAC TTG TCC GGA CGC CTC CGC CCC CTG CGC TGC
 22743 22752 22761 22770 22779 22788
 CAG CCG GGT CCA GGT CGG CGG TTG AAC AGG CCT GCG GAG GCG GGG GAC GCG ACG

 Q P G P G R R L N R P A E A G D A T
 S R V Q V G G * T G L R R G T R R
 A G S R S A V E Q A C G G G G R D G
 F A A * P F M R S P L A P A S R P R
 S P P K R S C A L R C R P H P V P V
 H L R S V P V H S V A A R T R F P S

 CAC TTC CGC CGA ATG CCC TTG TAC GCT CTG CCG TCG CGC CCA CGC CTT GCC CCT

22797 22806 22815 22824 22833 22842
 GTG AAG GCG GCT TAC GGG AAC ATG CGA GAC GGC AGC GCG GGT GCG GAA CGG GGA

V K A A Y G N M R D G S A G A E R G
 * R R L T G T C E T A A R V R N G D
 E G G L R E H A R R Q R G C G T G T

E1

C T R T M P P A P K M P E W Y T R S
 A R G P * R H L P S * R S G T R A R
 P V D Q D D T S R A E D A G L V H A

GCC GTG CAG GAC CAG TAG CCA CCT CGC CCG AAG TAG CCG AGG GTC ATG CAC GCG
 22851 22860 22869 22878 22887 22896

CGG CAC GTC CTG GTC ATC GGT GGA GCG GGC TTC ATC GGC TCC CAG TAC GTG CGC

R H V L V I G G A G F I G S Q Y V R
 G T S W S S V E R A S S A P S T C A
 A R P G H R W S G L H R L P V R A R

S T R S P S G A R T V T S S L S V *
 V P G P R R D P A P S R A P C A S R
 F Q D P V A I R R P H G H Q V L Q G

CTT GAC CAG GCC CTG CCG CTA GGC CGC GCC CAC TGG CAC GAC CTG TTC GAC TGG
 22905 22914 22923 22932 22941 22950

GAA CTG GTC CGG GAC GGC GAT CCG GCG CGG GTG ACC GTG CTG GAC AAG CTG ACC

E L V R D G D P A R V T V L D K L T
 N W S G T A I R R G * P C W T S * P
 T G P G R R S G A G D R A G Q A D L

A P F R A F R S G T A P R Y V K T C
 R R S G P S G P A P R R G T C R R A
 V G P V Q R V Q L R D G A P V G E H

ATG CGG CCC TTG GAC CGC TTG GAC CTC GGC CAG CGG CCG GCC ATG TGG AAG CAC
 22959 22968 22977 22986 22995 23004

TAC GCC GGG AAC CTG GCG AAC CTG GAG CCG GTC GCC GGC CGG TAC ACC TTC GTG

Y A G N L A N L E P V A G R Y T F V
 T P G T W R T W S R S P A G T P S C
 R R E P G E P G A G R R P V H L R A

P S M Q S A L S S A S T T G P W S R
 R R C R R H W A A R R P P G R G R D
 V A V D A I G P Q E G L H D G A V I

GTG CCG CTG TAG ACG CTA CGG TCC GAC GAG CGG CTC CAC CAG GGG CCG GTG CTA
 23013 23022 23031 23040 23049 23058

CAC GGC GAC ATC TGC GAT GCC AGG CTG CTC GCC GAG GTG GTC CCC GGC CAC GAT

H G D I C D A R L L A E V V P G H D
 T A T S A M P G C S P R W S P A T I
 R R H L R C Q A A R R G G P R P R S

T T L K A A S D C T S R D I A S A A
 P P * S R P R I A R R G T S R R R P

Q H D V E R G F R V D V P R D G V R
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 L V V N F A A E S H V D R S I A D A
 W W S T S R P N R T S T G R S P T R
 G G Q L R G R I A R R P V D R R R G
 G N M R V L T C P T W A S M C T H R
 A T * V Y W H A P R G P V * A P T G
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 GCG CCG TTC ATA CGT ACC AAT GTG CAG GGC GTC CAG GCA CTC ATG CAG GTG TGC
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 A V H T Y Q C A G R P G T H A G V P
 S A P V A L I T C T E V S S T Y P L
 P P R C P W S R A P R W R R P T R C
 Q L G A R G P D H L D G G V L H V A
 GAC CTC CGG CCG TGC CGG TCC TAG CAC GTC CAG AGG TGG CTG CTC CAC ATG CCG
 23175 23184 23193 23202 23211 23220
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 L E A G T A R I V Q V S T D E V Y G
 W R P A R P G S C R S P P T R C T A
 G G R H G Q D R A G L H R R G V R Q
 M S V P E Q S S S A G I A G L E G *
 C R S P S R P R P R A S R G W S A R
 A D L R A G P V L V R R D G G V R G
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 S I E T G S W D E D A P I A P N S P
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 H R D G L L G R G R A D R P Q L A L
 A A D L A P P S M T A R A * A R V W
 R P T W P P R R C P R G R R R G C G G
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 T R R P R R A A T W S P S P T P A P P
 R G V Q G G R R H G R P R L R P H P

P S G T L T V R H P L L * P G * * N
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 GTA CCC GAC GGC CAC TCG CAC TGC GCC ACG CCG TTG TTG ATG CCC GGG ATA GTC
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 M G C R * A * R G A A T T T G P I S
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 G S F T T G S N V V R S S S P W L M
 G P S P R E A T * W G A A P R G C C
 E R L L D N R Q E G G P Q Q V A V A

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 G S Y P S P P L T R S Q T C T D S W
 G A T R P H R C R G P S P A R T R G
 D R Q V P I A A V D P V P H V H G V

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 S R C T G M A A T S G T G C T C P T
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 T R P M R S T A S R P S G P C T * W
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 V H P A D P Q D G F A P Q R P L D V

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 V G Q A G A P V P D L T Y G V P L S

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 V V P A V R Q A V G A E A R E A V C

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 R T D N S C P R A S V T R Q Y A S F
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 G T H R E L L A E G V G H A P V G L

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 CCC CGT GTG TCG TTC GAG CAA GGC CTC GCC GAC ACC GTG CGC TGG TAC GCC GAG

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 P V C R S S K A S P T P C A G T P R
 P C V V R A R P R R H R A L V R R E

 R S Q H S G N F S R A S D S P M A R
 G P S T P A T S R A R A T R R C P E
 V P V P P L R Q V L A R Q G V A H S

 TTG GCC CTG ACC ACC CTC GGC AAC TTG CTC GCG CGC GAC AGG CTG CCG TAC CGA
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 T G T G G S R * T S A R C P T A W L
 P G L V G A V E R A R A V R R H G S

 A T G V A G M V L P S G A R P S G R
 P R A S L V W S * P L A R G R A E G
 Q G H R C C G H S P S L G G A P K G

 GAC CGG CAC GGC TGT CGT GGG TAC TGA TCC CCT CTC GGG CGG GCG CCC GAA GGG

23823 23832 23841 23850 23859 23868
 CTG GCC GTG CCG ACA GCA CCC ATG ACT AGG GGA GAG CCC GCC CGC GGG CTT CCC

L	A	V	P	T	A	P	M	T	R	G	E	P	A	R	G	L	P
W	P	C	R	Q	H	P	*	L	G	E	S	P	P	A	G	F	P
G	R	A	D	S	T	H	D	*	G	R	A	R	P	R	A	S	P

R Q G F E K N R T T K W I K W S I Q
E S V S N K T E R Q K A N N E L N E L S K
K A S R I R Q K A N N E L N E L S K

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GAA GCG ACT GGC TTA AGA AAC AAA GCG CAA CAA AAG GTC TAA AAG GTC CTC TAA
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CTT CGC TGA CCG AAT TCT TTG TTT CGC GTT GTT TTC CAG ATT TTC CAG GAG ATT

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L	R	*	P	N	S	L	F	R	V	V	F	Q	I	F	Q	E	I
F	A	D	R	I	L	C	F	A	L	F	S	R	F	S	R	R	F
S	L	T	E	F	F	V	S	R	C	F	P	D	F	P	G	D	L

H R V T Q H G A S G A E D A R M H R
I A C Q R T V P A S L R S * R S A C M T H A
S P A S D P S R R L R S A H T A P

ACT	ACC	GCG	TGA	CAG	ACC	ACT	GGC	CGC	CTC	GGC	CGA	AGT	AGC	CGA	GCG	TAC	ACC
23931			23940			23949			23958			23967			23976		
TGA	TGG	CGC	ACT	GTC	TGG	TGA	CCG	GCG	GAG	CCG	GCT	TCA	TCG	GCT	CGC	ATG	TGG

* W R T V W * P A E P A S S A R M W
 D G A L S G D R R S R L H R L A C G
 (M) A H C L V T G G A G F I G S H V A
 L S Q E A A P V P Y R D E V V E A A
 S A R S L R P C R T D T R S S R L P
 P P E A * G R A G P I P G R R R G * R

GCC TCC GAG ACG AGT CGG CGC CCG TGG CCC ATA GCC AGG AGC TGC TGG AGT CGC
 23985 23994 24003 24012 24021 24030
 CGG AGG CTC TGC TCA GCC GCG GGC ACC GGG TAT CGG TCC TCG ACG ACC TCA GCG

R R L C S A A G T G Y R S S T T T S A
G G S A Q P R A P G I G P R R P Q R
E A L L S R G H R V S V L D D L S G

A G G L T D G L A R V Q E G P R H G
P V A S R T G S P A C R N V P D T V
R C R R A H G R P R A G T * R T P S

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CGC CGT GGC GGC TCG CAC AGG GGC TCC CGC GCG TGG ACA AGT GGC CCA GCC ACT
      24039      24048      24057      24066      24075      24084
GCG GCA CCG CCG AGC GTG TCC CCG AGG GCG CGC ACC TGT TCA CCG GGT CGG TGA

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A A P P S V S P R A R T C S P G R *
R H R R A C P R G R A P V H R V G D
G T A F P V P F C A H I E T G S H D

I H L Q D V P E E G L L S E V V D E
S T S S T S L S K A S C R N S W T K

R H P A P R C A R R R A A I R G R R
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 CCG ATG TGG AGC TGG TCG ACA GGC TCT TCG CCG AGC AGC GAT TCG ACC ACG TCT
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 R C G A G R Q A L R R A A I R P R L
 D V E L V D R L F A E Q R F D H V F
 V E R R E R R L R D T V R H L A E V
 W K A A N A A S A I L * E T F L R L
 G S R P T R P P S * D S P S S G *
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 P L R G V R G G G D Q S L G E E P Q
 H F A A F A A E A I S H S V K S L N
 V A G V H H A A H V E D V R R Q S G
 * P V L T I P L T F R M L A A S R V
 S R C W R S P C R S G * * R P A A F
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 L R H Q R D G Q R E P H Q R G A A N
 Y G T N V M G S V N L I N A A L R T
 A D R E E T E R G G D R H V P V A L
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 G V S F F C F A S S V A V Y G H G E
 G R H P L R R D R Y R G V T V A V R
 V G I R S D D I G T G A S L * P L A
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F E R D L A L Q F R R H P G L A Q G
 F S V T S R S S S V V I R V W P R G
 S V * P R A R A P F S S A S G P G A

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 K L T V E R E L E T T M R T Q G L P

 E G C E T H V V H V A F P L V H A V
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 G I A I R D G N E E V L D Q A T L R
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 G R D C H P R W K R * G S G A R H A

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 P L S Q C G R H F L Q P D P A R * A
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 I E T * P S P P * T R A N L * T L S
 S R P R R R R D P A P T * S R * P

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 A H P P R H G W G G W R A G A R G P

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 L H H D G V G G L L G A L D E A V
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 E T P G A S S R E E K S I S I P P S
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 A R G P T P A T H P R G A S R R R G
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 S A S R S G R S V W P T G * A A A P T
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 S G W G L G D R K S A C R V T S T L
 H D G A W A T E S P L A G S L P P L
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 V I P S P S R L A W K R T * Q W R *
 * S P A Q A V S L G S A P D S G G K
 C C H V I K L N P T P Y T F E L R P
 A V T F S R S I R R R T R S S S G H
 P L L S R D Q S E A D P V H V R A T
 TCC GTT GTC ACT TGC TAG AAC TCT AAG CCG CAG CCC ATG CAC TTG AGC TCG GCA
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 AGG CAA CAG TGA ACG ATC TTG AGA TTC GGC GTC GGG TAC GTG AAC TCG AGC CGT
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 G N S E R S * D S A S G T * T R A V
 A T (V) N D L E I R R R V R E L E P W
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 V Q Q A L R G L L P G V R E E R R E
 * R S L W G G W S R A S A N K A A N

GS

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 V V G L G L G A A E A D V H A P Q V
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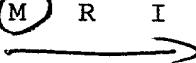
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 CCC AGG GCG CGG ACC CGT GGC AGC TGG GGC CGA TCC GGG GCA GAC GCG TGT GCA
 P R A R T R G S W G R S G A D A C A
 P G R G P V A A G A D P G Q T R V H
 Q G A D P W Q L G P I R G R R V C I
 D P A V R G R A D E A G V Y R R Q P
 T Q P L E A E P M K P A S T G A S R
 R R P C S P R P C R R R R V P A A
 AGC AGA CCC CGT TGA GCC GGA GCC CGT AGA AGC CGC GGC TGC ATG GCC GCG ACG
 27225 27234 27243 27252 27261 27270
 TCG TCT GGG GCA ACT CGG CCT CGG GCA TCT TCG GCG CCG ACG TAC CGG CGC TGC
 S S G A T R P R A S S A P T Y R R C
 R L G Q L G L G H L R R R R T G A A
 V W G N S A S G I F G A D V P A L R
 V G D V R R H P L A R L H H E R R R
 C A M S A A T R C P A S T T S V A G
 A R W R R P P A A P R P P P A * P A
 CCG TGC GGT AGC TGC GCC GCC ACG CCG TCC CGC GCC TCC ACC ACG AGT GCC GCG
 27279 27288 27297 27306 27315 27324
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 G T P S T R R C G R A R R R W C S R R
 A R H R R G G A A G R G G G A H G A
 H A I D A A V R Q G A E V V L T A P
 L F L H L L Q S R Q R G A D P H Q A
 C S C T S S S P A S G A P T R T S R
 A P V P P A P L A A P R R R G P A A
 GCG TCC TTG TCC ACC TCC TCG ACC CTC GCG ACG GCC GGC CGC AGG CCC ACG ACG
 27333 27342 27351 27360 27369 27378
 CGC AGG AAC AGG TGG AGG AGC TGG GAG CGC TGC CGG CCG GCG TCC GGG TGC TGC
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 A G T G G G A G S A A G R R P G A A
 Q E Q V E E L G A L P A G V R V L R
 V A R Q L E D E R V A V Q Q H V V A
 L Q G S S S M R G Y Q S R S T C W P
 C S G A P A * G G T S R G A P A G R
 CGT TGA CGG GCG ACC TCG AGT AGG AGG GCA TGA CGC TGG ACG ACC ACG TGG TGC
 27387 27396 27405 27414 27423 27432
 GCA ACT GCC CGC TGG AGC TCA TCC TCC CGT ACT GCG ACC TGC TGG TGC ACC ACG
 A T A R W S S S S R T A T C W C T T
 Q L P A G A H P P V L R P A G A P R
 N C P L E L I L P Y C D L L V H H G

A G V A V H V A D H R P N R L Q G E
 L A L Q * M F P M T A P I G C S D R
 C R W S S C S R C R P P S E A A T G

 CGT CGC GGT TGA CGA TGT ACT TGC CGT AGC ACC GCC CCT AAG GCG TCG ACA GGG
 27441 27450 27459 27468 27477 27486
 GCA GCG CCA ACT GCT ACA TGA ACG GCA TCG TGG CGG GGA TTC CGC AGC TGT CCC

 A A P T A T * T A S W R G F R S C P
 Q R Q L L H E R H R G G D S A A V P
 S A N C Y M N G I V A G I P Q L S L
 G E V V V R Q D A A A T D I G G A G
 A R L * S V S I Q P R R I S G A P A
 R G * S R C A S R R G G Y R D R R R

 AGC GGG AGT TGA TGT GCG ACT AGA CGC CGG CGG CAT AGC TAG GGC GGC CGC
 27495 27504 27513 27522 27531 27540
 TCG CCC TCA ACT ACG ACA CGC TGA TCT GCG GCC GCC GTA TCG ATC CCG CCG GCG

 S P S T T T R * S A A A V S I P P A
 R P Q L R H A D L R P P Y R S R R R
 A L N Y D T L I C G R R I D P A G A
 G Q G Q G A K L G R G L L D L L R Q
 V R V R D P R S A V A S F T S S A S
 W G S G T R G Q P W P R S P R P P A

 GGT GGG ACT GGG ACA GGC CGG AAC TCC GGT GCC GGC TCT TCC AGC TCC TCC GCG
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 CCA CCC TGA CCC TGT CCG GCC TTG AGG CCA CGG CCG AGA AGG TCG AGG AGG CGC

 P P * P C P A L R P R P R R S R R R
 H P D P V R P * G H G R E G R G G A
 T L T L S G L E A T A E K V E E A L
 A P H Q E V V A V A P R R L F Q P V
 R R T S N S W R * R R A A S F S R S
 A G P A T R G G S G G P P P S V A P

 ACG CGG CCC ACG ACA AGC TGG TGG CGA TGG CGG CCC GCC GCC TCT TTG ACG CCC
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 TGC GCC GGG TGC TGT TCG ACC ACC GCT ACC GCC GGG CGG CGG AGA AAC TGC GGG

 C A G C C S T T A T A G R R R N C G
 A P G A V R P P L P P G G G E T A G
 R R V L F D H R Y R R A A E K L R D

 A D L P C R R G G R D G P Q Q G A E
 P T S R A G E G A A T A P S S V R R
 R R R A P V K A R R P R R A A S G G

 TGC CGC AGC TCG CCC GTG GAA GCG GGC GGC GCC AGC GGC CCG ACG ACT GGG CGG
 27657 27666 27675 27684 27693 27702
 ACG GCG TCG AGC GGG CAC CTT CGC CCG CCG CGG TCG CCG GGC TGC TGA CCC GCC

T A S S G H L R P P R S P G C * P A
R R R A G T F A R R G R R A A D P P
G V E R A P S P A A V A G L L T R L

H R V A P Q R R L V D G L D H V V G
T A S P P S D A F S T A S T T S L A
R P P R R A T P S P R R R P R P C R

AGC ACC GCC TGC CGC CCG ACA GCC GCT TCC TGC AGC GGC TCC AGC ACC TGT TGC
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TCG TGG CGG ACG GCG GGC TGT CGG CGA AGG ACG TCG CCG AGG TCG TGG ACA ACG

S W R T A G C R R R T S P R S W T T
R G G R R A V G E G R R R G R G Q R
V A D G G L S A K D V A E V V D N A

G L S P P A R S L R A S S P V A P R
V S A R L L A H C D P Q L L S L P G
W R P E S S R T V I P S F F P C R A

GGT GGC TCC GAG CCT CCT CGC GCA CTG TTA GCC CGA CTT CTT CCC TGT CGC CCG
27765 27774 27783 27792 27801 27810
CCA CCG AGG CTC GGA GGA GCG CGT GAC AAT CGG GCT GAA GAA GGG ACA GCG GGC

P P R L G G A R D N R A E E G T A G
H R G S E E R V T I G L K K G Q R A
T E A R R S A * Q S G * R R D S G P
R * R P H R S * R S G G T R V A * R
D D G P T G A E D A G V Q A F P E D
T T V P P A P K M P E W R H S R S M

E2

GCA GCA GTG GCC CCC ACG GCC GAA GTA GCC GAG GGT GGA CAC GCT TGC CGA GTA
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CGT CGT CAC CGG GGG TGC CGG CTT CAT CGG CTC CCA CCT GTG CGA ACG GCT CAT

R R H R G C R L H R L P P V R T A H
V V T G G A G F I G S H L C E R L I
S S P G V P A S S A P T C A N G S S

A P D T P S R R P C G T W R C S R S
L P T Q R H G A H V V Q G G A P D R
S R P R D T V Q T S L R D V P L I A

GCT CGC CCC AGA CAG CCA CTG GAC GCA CCT GTT GGA CAG GTG GCC GTC CTA GCG
27873 27882 27891 27900 27909 27918
CGA GCG GGG TCT GTC GGT GAC CTG CGT GGA CAA CCT GTC CAC CGG CAG GAT CGC

R A G S V G D L R G Q P V H R Q D R
E R G L S V T C V D N L S T G R I A
S G V C R * P A W T T C P P A G S R

G R R A R R P A T * A A A P R R S
V E V R E G V L L P E R Q Q P G V H
F R S A S A S S S R N V S S R A S T

CTT GGA GCT GCG CGA GCG GCT GCT CCT CGC CAA GTG CGA CGA CGC CCG GCT GCA

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 GAA CCT CGA CGC GCT CGC CGA CGA GGA GCG GTT CAC GCT GCT GCG GGC CGA CGT

 E P R R A R R R G A V H A A A G R R
 N L D A L A D E E R F T L L R A D V
 T S T R S P T R S G S R C C G P T *
 R A T R R P A P G G R R G G P T A
 G L R E G D L P R D V V D D V Q R R
 V S G N E T S P G T W W T T W R A D

 CTG GCT CGG CAA GAG GCA GCT CCC CGG CCA GGT GGT GCA GCA GGT GGA CCG CAG
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 GAC CGA GCC GTT CTC CGT CGA GGG GCC GGT CCA CCA CGT CGT CCA CCT GGC GTC

 D R A V L R R G A G P P R R P P G V
 T E P F S V E G P V H H V V H L A S
 P S R S P S R G R S T T S S T W R R
 P R G G P S D P A A A P S A A P R S
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 G A E G R S * R A S G S S V S R T P

 CGG CCG GAG GGG GGA CCT GAT AGA CCG CGA CGG CGA CCT CTG CGA CGC CCA GCC
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 GCC GGC CTC CCC CCT GGA CTA TCT GGC GCT GCC GCT GGA GAC GCT GCG GGT CGG

 A G L P P G L S G A A A G D A A G R
 P A S P L D Y L A L P L E T L R V G
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 P R S R S R A A A P P P A R R G S R
 R G P G L V R Q P Q R H R V A G A E
 E A P V S F A S R S A T A C P A R K

 GAG CCG GCC CTG GCT CTT GCG CGA CGC CGA CGG CCA CGG CGT GCC GCG GGC GAA
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 CTC GGC CGG GAC CGA GAA CGC GCT GCG GCT GGC GGT GGC GCA CGG CGC CCG CTT

 L G R D R E R A A A G G G A R R P L
 S A G T E N A L R L A V A H G A R F
 R P G P R T R C G W R W R T A P A S
 P R R W R P S R R P D R R A G A T R
 H D G G G R L D V P I G G L V R L G
 T T A E V E S I * P S G A S C G C D

 GCA CCA GCG GAG GTG GAG CCT CTA GAT GCC CCT AGG GCG GCT CGT GGG CGT CAG
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 CGT GGT CGC CTC CAC CTC GGA GAT CTA CGG GGA TCC CGC CGA GCA CCC GCA GTC

 R G R L H L G D L R G S R R A P A V
 V V A S T S E I Y G D P A E H P Q S
 W S P P R R S T G I P P S T R S P
 S S S P C R * G S R G A N P T R R P
 L A V P A V D V R D A R T R H V V L

S L * Q P A L T L G I P G R E T Y S S

 GCT CTC GAT GAC CCC GTT GCA GTT GGG CTA GCC GGG CGC AAG CCA CAT GCT GCT
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 CGA GAG CTA CTG GGG CAA CGT CAA CCC GAT CGG CCC GCG TTC GGT GTA CGA CGA

 R E L L G Q R Q P D R P A F G V R R
 E S Y W G N V N P I G P R S V Y D E
 R A T G A T S T R S A R V R C T T R

 W V T * R P A S R R R R A C A P R P
 G F P E G L R Q G G G V R A R Q A R
 A L R N V S A S V A A * A R V S P A

 CCG GTT TGC CAA GTG GCT CCG CGA CTG GCG GCG GAT GCG CGC GTG CGA CCC GCG
 28251 28260 28269 28278 28287 28296
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 G Q T V H R G A D R R L R A H A G R
 A K R F T E A L T A A Y A R T L G A
 P N G S P R R * P P P T R A R W A R

 C R C Q G G T * S R R V A S A G R R
 V G A N G A Q E V G V S R P H A A V
 S V P M A R R N L E * P G R I R R S

 CCT GTG GCC GTA ACG GGC GGA CAA GTT GAG GAT GCC TGG CGC CTA CGC GGC GCT
 28305 28314 28323 28332 28341 28350
 GGA CAC CGG CAT TGC CCG CCT GTT CAA CTC CTA CGG ACC GCG GAT GCG CCG CGA

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 D T G I A R L F N S Y G P R M R R D
 T P A L P A C S T P T D R G C A A T

 R A P P A S R * R G P A R R V A A *
 V P P H H R G E D V L R E G S Q R E
 S P R T T G V K M S W A S A P S G S

 GCT GCC CGC CCA CCA CGG CTG GAA GTA GCT GGT CCG CGA GCG GCC TGA CGG CGA
 28359 28368 28377 28386 28395 28404
 CGA CGG GCG GGT GGT GCC GAC CTT CAT CGA CCA GGC GCT CGC CGG ACT GCC GCT

 R R A G G A D L H R P G A R R T A A
 D G R V V P T F I D Q A L A G L P L
 T G G W C R P S S T R R S P D C R S

 W * R C R R G S G T A T S R R P C P
 G D V A A A G L G P R Q A V D L V R
 V M L P L P A W V R D S H * T S S V

 GTG GTA GTT GCC GTC GCC GCG GGT CTG GGC CAG CGA CAC GAT GCA GCT CCT GTG
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 CAC CAT CAA CGG CAG CGG CGC CCA GAC CCG GTC GCT GTG CTA CGT CGA GGA CAC

 H H Q R Q R R P D P V A V L R R G H
 T I N G S G A Q T R S L C Y V E D T
 P S T A A A P R P G R C A T S R T R

A P V S P G S P S T R G P G P * C R
 H P S Q H G Q H V R G E R A R D V D
 T R P S I A R I S E D K G P G T L M

 CCA CGC CCC TGA CTA CCG GGA CTA CCT GAG CAG GAA GGG CCC GGG CCA GTT GTA
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 G A G T D G P D G L V L P G P G Q H
 V R G L M A L M D S S F P G P V N I
 C G D * W P * W T R P S R A R S T S

 R S R H S S R G D S R P P S R R V R
 A R G T L H G D T L D R L R D G C E
 P A V P S I V T R * I A S A I A A S

 GCC GCG CTG GCC ACT CTA CTG GCA GGC AGT CTA GCG CCT CCG CTA GCG GCG TGA
 28521 28530 28539 28548 28557 28566
 CGG CGC GAC CGG TGA GAT GAC CGT CCG TCA GAT CGC GGA GGC GAT CGC CGC ACT

 R R D R * D D R P S D R G D R R T
 G A T G E M T V R Q I A E A I A A L
 A R P V R * P S V R S R R S P H S

 P L P A A S R T G R A P P P R A R G
 R S H L Q P G L E A R R R L V L G A
 A P T S S R V S N R A G A S S S G P

 GCG CCC TCA CCT CGA CGC CTG GCT CAA GGC GCG CGG CCG CCT CCT GCT CGG GCC
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 R G S G A A D R V P R A G G G R A R
 A G V E L R T E F R A P A E D E P G
 R E W S C G P S S A R R R R T S P A

 A S G R C R S R W S S A P S S A R P
 P A A G V D L G G P R L Q A P L G L
 R R Q G S M S V A L V F S P Q F G S

 GGC CGC GAC GGG GCT GTA GCT CTG GCG GTC CTG CTT CGA CCC GAC CTT CGG GCT
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 CCG GCG CTG CCC CGA CAT CGA GAC CGC CAG GAC GAA GCT GGG CTG GAA GCC CGA

 P A L P R H R D R Q D E A G L E A R
 R R C P D I E T A R T K L G W K P E
 G A A P T S R P P G R S W A G S P R

 A A R R L A * A C G A R T P S C R G
 H R E G F P E L A G Q E P P L A G V
 T G S A S P S L R V R S Q H S L V *

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 GGT GCC GCT CGC CGA AGG GCT CAA GCG CAC CCT GCT CTG GTG GGA GAG CAC CTA

G A A R R R A Q A H P A L V G E H L
V P L A E G L K R T L L W W E S T Y
C R S P K G S S A P C S G G R A P T

A P C P G R R R S R N S R C * S H L
R P V H G V V A H V T R A V D P T S
G R S M A W S P T F P E L S M L L P

GGG CGC CCT GTA CCG GGT GCT GCC GCA CTT GCC AAG CTC GCT GTA GTC CTC ACC
28737 28746 28755 28764 28773 28782
CCC GCG GGA CAT GGC CCA CGA CGG CGT GAA CGG TTC GAG CGA CAT CAG GAG TGG

P A G H G P R R R E R F E R H Q E W
P R D M A H D G V N G S S D I R S G
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P M V L W V G A P L P T R I G R L T
R C S L G S V P R C P P A S A G S R
A A H C A L C R G A L P H P H G P A

TCG CCG TAC TGT TCG GTC TGT GGC CGG CCG TTC CCC CAC GCC TAC GGG GCC TCG
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AGC GGC ATG ACA AGC CAG ACA CCG GCC GGC AAG GGG GTG CGG ATG CCC CGG AGC

S G (M) T S Q T P A G K G V R M P R S
A A * Q A R H R P A R G C G C P G A
R H D K P D T G R Q G G A D A P E R

S S S L T T Q S H S S G S P M C T R
R P V * R P R P T P R G R P C A P A
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CAG CTC CTT GAG TTG CAC CAG ACC CTC ACC CTG CTG GGG CTC CCG TAC GTC CAC
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GTC GAG GAA CTC AAC GTG GTC TGG GAG TGG GAC GAC CCC GAG GGC ATG CAG GTG

V E E L N V V W E W D D P E G M Q V
S R N S T W S G S G T T P R A C R C
R G T Q R G L G V G R P R G H A G A

S A P * * G R S S Y R R S R A S R I
A R P S D A G H R T D A R G H R A S
P E R A I L G T V L I Q A V T G L P

GCC GAG CGC CCG ATA GTC GGG GCA CTG CTC ATA GAC GCG CTG GCA CGG CTC GCC
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A R G L S A P * R V S A R P C R A D

S W N A A A S D R V G S V S R N S I
R G T P R P A T G S G P C R D T R S
D V L Q G R R Q G Q G R V G I Q E L

TAG CTG GTC AAC CGG CGC CGC GAC AGG GAC TGG GGC CTG TGG CTA GAC AAG CTC

G2

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 S T S W P R R C P * P R T P I C S R
 R P V G R G A V P D P G H R S V R D
 P L P S P T M A R S S A G R T P L R
 R C R R P R * P G R A P A G P R C G
 D A A A L A D H G A L Q R G P D A A

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 ATC GGC AGC GGC GAG GGC GTC ATG GCC CGC GAG CTG GCG CCC CGG GTC GGC AGC

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 R Q R R G R H G P R A G A P G R Q P
 S H A S T L R D N R S F V R A V Q A
 A T R P R * G T T G P S S G R W R H
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 L L C A D V S L S F L E K T R A T C
 C C A R T S A C R S W R R P A P P V
 A V R G R Q P V V P G E D P R H L C
 P R G L T V * W W M R F S * R A P S
 P A A W R * R G G C G S R S G P R V
 R P P G V D G V V V D P V V V Q G S

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 G A A Q R H L P P H P E R L P G R T
 G S A E K S A P N A S L T K M W R F
 E P R R R R R R I R A * R R * G G S
 K R V G G E V G S E R E V D E D V Q

 GAA GGC CTG CGG AGG AAG CTG CGG CCT AAG CGC GAG TTG CAG AAG TAG GTG GAC
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 F R T P P S T P D S R S T S S S T *
 S G R L L R R R I R A Q R L H P P E
 A K S T * R * R R S I R R T S R G P
 R R R P R G R G A R S G A P A A A A R

V G E L D V E V Q A L D P P H Q P G
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 N A F E V Y L Y L R E I R R V L R P
 T P S R S T S T C A R S G G C C G P
 R L R G L P L P A R D P A G A A A R
 P R N R K L * R S K P S T V L G C N
 R G T G R * S G P S R R P * W A A T
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 G G R F L F N Y L D F G E V T R P Q
 A A G S S S T T W T S A R S P G R S
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 W S Y T L L * G P A C G T A T L P N
 G R T R * S S G R P A G P R R * P I
 E V L V D L A V G P R V R D G D L S
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 S T S T S R A T P G R T R S P S R D
 P R V R Q E L P R G A P G R R Q G I
 M D Q S P V S T T R L S A A S A P S
 * T R A R C R R P G C A R P P P R A
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 S C P G S A P T W S A S S R R P G
 H V L A R H R R G P Q A R G G G R A
 V G T G P D C S S W P P T Q K R V R
 S V P V R T A R R G P R R R S G * G
 Q C R Y G P R V V V L A A D A E E G
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 L T P V P G S H D D Q G G V C F L T
 * H R Y P G R T T T R A A S A S S P
 D T G T R V A R R P G R R L L P H P

R L S C S A A H P V A R Q S P L A G
 A C P V P P Q T L Y R V S P R C P G
 Q A P F L L S R S T G C A P V A L G

 GAC GCG TCC CTT GTC CTC CGA CGC ACT CCA TGG CGT GCG ACC CTG CCG TTC CGG
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 L R R E Q E A A * G T A R W D G K A
 C A G N R R L R E V P H A G T A R P
 A Q G T G G C V R Y R T L G R Q G P P
 ----- 21
 L D G G D A Q A G P R Q A P E P A A
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 R P R R R R G P C R P A S R T R P C

 GGC TCC AGA GGA GGC AGA CGG ACC CGT GGA CCC GCG ACT CGC CCA AGA CCC CGT
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 E V S S V C L G T W A L S G F W G S

 P G L R G D L R D P A R E V Q A D V
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 E E V G R V G V A R A H G L R S Q G
 K K S V A C A * P A P M A S A P S A
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 L L R H R A R L R R G H G R G G T G
 F F D T A H A Y G A G M A E A G L A

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 K G G L E L R G D G V V R N S D A G
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 K R R A L R V S L R R E S P V S * T
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 F L R A N L T D S L R S L G T D Y V
 V H E Q D V P G V R P D R R G L R R
 S T N R T W Q G S G L T G G A S V A
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 D V F L V H W P D P R V P P A E T A
 T R Q R P E H L F P E G P V H A D G
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 P H A P P T R P P L A R G T R P R R

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 G A L A G F V E E G L A R Y V G V S
 V E G D L F H G F E G G D D G R L D
 L K V T S S I A S N E E T T V G C T
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 H C A A A G I G V M G W S A L A H G
 H Q R S R E T G A L H E R G V V P A
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 V L A G A L R P G Q V F P P D D W R
 G V G R G E L A F A E G L Q E R G H
 A * E G V K W P S R K A L S S A A A T
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 R L L P D L P G R T L R Q A A R G R
 A Y S P T F Q G E R F A K L L A A V
 V P Q L L E G G F A P V T D G L E R
 S R S F S N A A S R P C L T A W S A

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 D R L K E F A A E R G H S V A Q L A
 K G P H Q G V G R S D D R D D A G L
 S A Q T S A W G E P T M G T M P A W
 A Q R P A P G G R P L * G P * R R G
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 A C L G A G P P L G S H P G H R R P
 L A W V L A H P S G V I P V I G A Q
 K G L V Q L V A D P G H V E V E V L
 S G S C R S S L T R A T S R S R S S
 A E R A G P P C R G P R P G R G R R
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 L P E H L E D S V R A V D L D L D E
 G L Q A G Q V F Q Q G V R G L Q V A
 A S S R A R S S S S A S A G S S S P
 P R A A R G P R V A P R R A R A P R
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 A E L R A L D E L L A D A P E L D G
 A P V L R G R A F L P R D S T A V S
 L P S W G G A R S S L D T Q P P W P
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 S G D Q P P A R E E R S V * G G H G

I G T G W S L S Q Y S W N V T S I M
 S A R G G A * R S T R G T S R R S *
 L H G D G L E V V P V V L Q G D L D

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 GAG ATG CCC GTC CCC CAG CTC AAC GAC TGG TAC GAC CAG TTG ACC GTC GAG ATC

 E (M) P V P Q L N D W Y D Q L T V E I
 R C P S P S S T T G T T S * P S R S
 D A R P P A Q R L V R P V D R R D H

 GE

S R T Q A G S E P Q R S M P A P P P
 R V P R R G R S R S G P C R H R R R
 D F P D A G G V G A A Q V D T G A A

TAG CTT GCC CAG ACG CGG GGG CTG AGG CCG ACG GAC CTG TAG CCA CGG CCG CGG
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 ATC GAA CGG GTC TGC GCC CCC GAC TCC GGC TGC CTG GAC ATC GGT GCC GGC GGC

 I E R V C A P D S G C L D I G A G G
 S N G S A P P T P A A W T S V P A A
 R T G L R P R L R L P G H R C R R R
 S I R V C M R R A A G R P R C K A T
 R S G * A C A G P R G A P G A S R P
 A L D E R V H A P G G R P A P V E R

CCG CTC TAG GAG TGC GTG TAC GCG GCC CGG CGG GCC CCG GCC GTG AAG CGC
 30627 30636 30645 30654 30663 30672
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 G E I L T H M R R A A P R G R H F A
 A R S S R T C A G P P R G A G T S R
 R D P H A H A P G R P A G P A L R G

S G S G C Y A S C S R R S K G S T V
 R A A A A T R R V A A G R S G R P *
 D L R Q R L V G F L Q A A V E G L D

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 V E P L P Q Y A E Q L R R D F P E V
 S S R C R S T P N S C A A T S P R S
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 P I A P R R P R W G Q G P C S R G R
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TGC CAT ACC GTC CGG CGG CGC CGG CGG TGG GGA CCG GCC CTG TCG AAG CAG GTG
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T V W Q A A A A A T P G R D S F V H
 R Y G R P P R P P P L A G T A S S T
 G M A G R R G R H P W P G Q L R P R

T E L G P * L P R R R R G Y S R A S
 P R W G R S C R G A G G D T R G R R
 H D G V G A V A A Q A A T R V V A G

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GTG GTC TCC AAC CCC GGC TAC AGC GGC CTG CGC CGC CGT CCG TAC GAC CGC GCC

V V S N P G Y S G L R R R P Y D R A
 W S P T P A T A A C A A V R T T A P
 G L Q P R L Q R P A P P S V R P R R

S V R S S I A T S V T R R S S T T G
 R S G P L S R P P C R V D P R R R G
 V L G Q F L D R H V G Y T Q V V D D

CTG CTC TGG GAC CTT CTC TAG CGC CAC CTG TGG CAT GCA GAC CTG CTG CAG CAG
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S S A R T S R T L T S T S P P S T P
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P E D A R V D L V K V D V E G G E V
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 A G Q A P R G L Q Q A P L G G H H D

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S C P P S W A I R S * P V V L S S R
 R V R R R G R S A R S R C W W R R G
 E F V A A V V R H A V Y A G G A V V

AAG CTT GTG CCG CCG CTG GTG CGC TAC GCG CTG ATG CCG TGG TGG TCG CTG CTG

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 L L A N S M V S V V A G E R A E R A
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 G E V H S T * P I Q L P P P S P P S
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 R S A F D (M) T D T T A P S L A S L A
 D G F A M D P L G A Q E R L V D G G
 T G S H W I R S V P R S G S C T D V A

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 E P P L T H Q G H A A Q Q A G G F Q
 K R R C P T S A T R P R S L G A S S
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 L P A A G C A G R A R P A E P R R T
 F R R Q G V L A V R G L L S P A E L

 L R H L L R R G A Q D V V G P A G P
 S D T C S A A A P R I S S A Q R V R
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 E S V Q E A A A G L I D D A W R T R

 G H V V G D P R Q L G V L G V R G R
 D M C S V M Q V S S G W S G S A A G
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 V H A R H H L D A G A P R A R R G P
 S M H D T I W T L E P H E P D A A P

 D A D L V D H V L G R H H G P Q R A
 T R M S Y T M S L D G T I A R S A P
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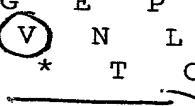
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 G K R R H R L Q L Q P H G A A G E G

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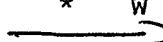
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 R L P G A V R Q S G R H G R L L G R
 A C R E L F G N P G V T G G S W V A
 P A G S C S A I R A S R A A P G S P

 A R S R A P R R A R V A A P A R R
 L V R D L Q G D G P G Y Q Q Q H E E
 S C A I S S A T A Q G T S S S T S K

 GCT CGT GCG CTA GCT CGA CCG GCA GCG GAC CGG GCA TGA CGA CGA CCA CGA GAA
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R A R D R A G R R L A R T A A G A L
 E H A I E L A V A W P V L L L V L F
 S T R S S W P S P G P Y C C C W C S S

A A T P A G S G S A * G I V V S S P
 H R Q R H A A V P R E A S S W P L L
 T G S D T R R * R V S L R H G R F F

GCA CGG CGA CAG CCA CGC GGC GAT GGC CTG CGA GTC GGC TAC TGG TGC CTT CTT
 35919 35928 35937 35946 35955 35964

CGT GCC GCT GTC GGT GCG CCG CTA CCG GAC GCT CAG CCG ATG ACC ACG GAA GAA

R A A V G A P L P D A Q P (M) T T E E
 V P L S V R R Y R T L S R * P R K K
 C R C R C A A T G R S A D D D H G R R

F G A I L A S G R A T R S * R V M R
 S V P S S R R V A H R G A R G S W A
 P F R R H A G F R T G D P E V P G H

CCC TTT GGC CGC TAC TCG CGG CTT GGC GCA CGG CAG GCC GAG ATG GCC TGG TAC
 35973 35982 35991 36000 36009 36018

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G K P A M S A E P R A V R L Y R T M
 G N R R * A P N R V P S G S T G P C
 E T G D E R R T A C R P A L P D H A

R I L S N S S R Q R A I D S D P S I
 G S * P I R L V S G P S T A T R P S
 A Q D P F E F F A A Q R H R Q G P L

GCG GAC TAG TCC CTT AAG CTT CTT GCG ACG GAC CGC TAC AGC GAC AGG CCC CTC
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R L I R E F E E R C L A M S L S G E
 A * S G N S K N A A W R C R C P G R
 P D Q G I R R T L P G D V A V R G D

T P P M W G * M P W S A T A A P T Q
 R R R C G G R C R G P P P P R R P R
 D D A A D V G V D A L L R H G G P D

TAG CAG CCG CCG TAG GTG GGG ATG TAG CCG GTC CTC CGC CAC CGG CGG CCC CAG
 36081 36090 36099 36108 36117 36126

ATC GTC GGC GGC ATC CAC CCC TAC ATC GGC CAG GAG GCG GTG GCC GCC GGG GTC

I V G G I H P Y I G Q E A V A A G V
 S S A A S T P T S A R R R W P P G S
 R R R H P P L H R P G G G R R G L

A A S V S S S T T V L V W R P W P W
 R P A * R R R R R * W C G D R G H G
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ACG CGC CGC GAG TGG CTG CTG CAG CAG TGG TCG TGG GTA GCG CCG GTA CCG

36135 36144 36153 36162 36171 36180
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 C A A L T D D D V V T S T H R G H G
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 R G A H R R R R R H Q H P S R P W P

 T R A L P A S G F R I S A S S H P V
 R G R W P L R G S A S A P R A T R C
 V D E G L S G V R L P H Q G L Q A A

 GTG CAG GAG CGG TTC CCT CGG CTG GGC TTC GCC TAC GAC CGG CTC GAC ACG CCG
 36189 36198 36207 36216 36225 36234
 CAC GTC CTC GCC AAG GGA GCC GAC CCG AAG CGG ATG CTG GCC GAG CTG TGC GGC

 H V L A K G A D P K R M L A E L C G
 T S S P R E P T R S G C W P S C A A
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 V A P R F R P R P P E I C A A S T L
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 T G G C G G C C G G A C T T G G C C G C C G A G C T A C G T G C G G C G G C T G C A G
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 R P P A * T G A A A A R C T P P T S
 D R R P E P G P R R L D A R R R R Q

 R P T * P A L P M T P A P A G M A A
 G R R R H R W R C R P P P R G W R R
 A E A D I A G V A D H P R A G G D G

 T C G G A G C C G C A G A T A C C G C G G T T G C C G T A G C A C C C C G C C G C G G G G G G T A G C G G
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 S L G V Y G A N G I V G A G A P I A
 A S A S M A P T A S W G R A P P S P
 P R R L W R Q R H R G G G R P H R R

 P A A Q D N W R R P S P R T A T A K
 R H P R T T G A A R H R G P P P P R
 G T R G P R E L P A T V A P H R H G

 C G G C C A C G C C G A C C A G C A A G G T C G C C G C C A C T G C C G G C C A C C G C C G
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 G C C G G T G C G G C C T G G T C G T C G G C G G G T G G G C G G G T G G G C G G G T G G G C C

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 P V R P G R S S G A V T A G W R W P
 R C G L V V P A A R * R P G G G G G L
 K P S P A S L W P T T S S A N L R A
 R R R R H A * G P R P A P P T * G P

E E A V T R E A L A H H Q L R E V Q
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 L R R R C A Q P G R G A G G V Q P G
 A R H R S G T T N T Q S F L P * A V
 P G T A A A P P T R R R S C R S R S
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 L R G S S R A S A P S G T S L A A P
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 P A C R W T G R W P A T R W R G R P
 Q P A A G P G A G R R P G G E G G R
 N P R V A R A T S P I S A S A T A S
 T R G S P A R P P R F P R R R R R R
 P E A Q R R A R H V S H V G V G D G
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 G S A * R R A R W T E W T P T P S P
 V R P D G A R G G R N G R R R R R R
 A A A S A T S R Q R R P P P G V K R
 R P R R P R R V S G G P R R D W R G
 V R G G L G D F A A A P A A T G G E
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 T R P P R P S N A A A G A A V P P P S
 R G R R G R R T L P P G R R R S H L P

S Q R V * R N L P W W E K S S C T P
 P S G C R G T * R G G S R R P A P P
 Q V A A G V P E V A V V G E L L L H

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 CTG GAC TGC CGC ACC TAC CGG TTC AAC GGC CAC CAC TCC TTC GAG GAG CAG GTG

 L D C R T Y R F N G H H S F E E Q V
 W T A A P T G S T A T T P S R S R W
 G L P H L P V Q R P P L L R G A G G

 S F * R S S A S T P S H R A R S G S
 A S S G P R R R P R R T A H A H G A
 P Q V V P V V G L D A L P T R T V R
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 G * T T G T T P R S A S G V R V T R
 A E L P G R R R G R R V A C A * P A

 R V W L V R T S P A V A P A M S A S
 A C G S C G R P R H S P R R W R R R
 Q A G L A G A H V T R R G A G D V G
 GAC GCG TGG GTC TCG TGG GCG CAC CTG CCA CGC TGC CGG CCG CGG TAG CTG CGG
 36783 36792 36801 36810 36819 36828
 CTG CGC ACC CAG AGC ACC CGC GTG GAC GGT GCG ACG GCC GGC GCC ATC GAC GCC

 L R T Q S T R V D G A T A G A I D A
 C A P R A P A W T V R R P A P S T P
 A H P E H P R G R C D G R R H R R R

 V L V S I S S A T S N A R A P R A G
 S W C A S R R P R P T R G R P G P G
 L G A R Q D V L G H L E G A R A P G
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 E T S T L I D E A V E F A R A G R A
 R P A R * S T R P W S S P A R A G P
 D Q H A D R R G R G V R P R G P G P

 S G A S A S C W R * A S P V V G R G
 R G R R P A A G G K H R R C S G V A
 G V G G L R Q V V K I G V A R G W P

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 CCC GAC CCC GCC GAG GCG CTG CAC CAC CTT TAT GCC GAC GGC ACG ACC CCA CGG

P D P A E A L H H L Y A D G T T P R
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P T I I Q H S C K R V D G R Q V L R
R L S S R I A A S A Y M V A S F W A
G S H H D S P Q V Q T C * R A S G P

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CCC GGA GTG ATG ATC TGA TGG CTG CAC TTG CGT ACA TCA CCG CGC TGA ACC AGG

P G V M I * W L H L R T S P R * T R
P E * * S D G C T C V H H R A E P G
R S D D L (M) A A L A Y I T A L N Q A

B2

Q V V L H R A V V A D A D E A L V H
S C S S I A R S S R T Q T K P S S T
A A R R S P A R R G R R R R R P R

GCG ACG TGC TGC TCT ACC GCG CGC TGC TGG CGC AGA CGC AGA AGC CGC TCC TGC
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CGC TGC ACG ACG AGA TGG CGC GCG ACG ACC GCG TCT GCG TCT TCG GCG AGG ACG

R C T T R W R A T T A S A S S A R T
A A R R D G A R R P R L R L R R G R
L H D E M A R D D R V C V F G E D V

P D A E G L D G L A Q V L A E A V S
R I P R V W T A L P R C S R K P S P
A S R G * G P R W P G A R A S R R R

ACG CCT AGC CGG AGT GGG TCC AGC GGT TCC CGG ACG TGC TCG CGA AGC CGC TGC
37053 37062 37071 37080 37089 37098
TGC GGA TCG GCC TCA CCC AGG TCG CCA AGG GCC TGC ACG AGC GCT TCG GCG ACG

C G S A S P R S P R A C T S A S A T
A D R P H P G R Q G P A R A L R R R
R I G L T Q V A K G L H E R F G D G

A D D V G G Q R L L G E G A Q G G A
R T T S V G R D S C A K V L R A V P
V R R R C G G T P A P R * W G P W R

CTG CGC AGC AGC TGT GGG GGG ACA GCC TCG TCC GGA AGT GGT CGG ACC GGT GGC
37107 37116 37125 37134 37143 37152
GAC GCG TCG TCG ACA CCC CCC TGT CGG AGC AGG CCT TCA CCA GCC TGG CCA CCG

D A S S T P P C R S R P S P A W P P
T R R R H P P V G A G L H Q P G H R
R V V D T P L S E Q A F T S L A T G

R R H R P L S R D H L V L D G R Q E
A A I A P C R G T T S Y W I G E S S
R P S P P A A V P R P T G S G R A A

CGC GCC GCT ACC GCC CCG TCG CTG GCC AGC ACC TCA TGG TCT AGG GGA GCG ACG

37161 37170 37179 37188 37197 37206
 GCG CGG CGA TGG CGG GGC AGC GAC CGG TCG TGG AGT ACC AGA TCC CCT CGC TGC

 A R R W R G S D R S W S T R S P R C
 R G D G G A A T G R G V P D P L A A
 A A M A G Q R P V V E Y Q I P S L L
 I Q H E L L D G V L R V L E R Q H G
 * R T N S C I A L W A C L N E S I V
 R D P T R A S R W G P A C T R A S S

 AGA TAG ACC ACA AGC TCG TCT AGC GGT TGG TCC GCG TGT TCA AGA GCG ACT ACT
 37215 37224 37233 37242 37251 37260
 TCT ATC TGG TGT TCG AGC AGA TCG CCA ACC AGG CGC ACA AGT TCT CGC TGA TGA

 S I W C S S R S P T R R T S S R * *
 L S G V R A D R Q P G A Q V L A D D
 Y L V F E Q I A N Q A H K F S L M T
 T P L H L D R D G I Q H R A G T R A
 P P C T S T G T V * R T G P E P E R
 R H A P P G P * R D P A P S R N A

 GGC CAC CCG TCC ACC TCC AGG GCC AGT GGA TAG ACC ACG GCC CGA GGC CAA CGC
 37269 37278 37287 37296 37305 37314
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 P V G R W R S R S P I W C R A P V R
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 G G Q V E V P V T Y L V P G S G S R

 R A H G A L V G V M G V A Q E C V D
 E P M A P W C E S W G * L R N A C T
 S P C P R G A S R G D R C G T R V R

 CGA GCC CGT ACC GGC CGG TCG TGA GGC TGG TAG GGA TGT CGG ACA AGC GTG TGC
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 S G M A G Q H S D H P Y S L F A H V

 A D L R D Q G G G G R V G V A Q Q E
 P M L V T R G A V A E S A * P R S S
 R C * S P G A R W R R P R R R G A A

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 G I K T V L P A T A S D A Y G L L L
 R R D T V R V R H G D E R R A R Q H
 E A T R S G S G T A T K A G L A S I

R P P G H G P G P P R R R A S R A S

AGA GCC CCC AGG CAC TGG GCC TGG GCC ACC GGC AGA AGC GCG GCT CGC GCG ACT
37431 37440 37449 37458 37467 37476

TCT CGG CGG TCC GTG ACC CGG ACC CGG TGG CCG TCT TCG CGC CGA GCG CGC TGA

S R R S V T R T R W P S S R R A R *
L G G P * P G P G G R L R A E R A D
S A V R D P D P V A V F A P S A L M

A R D L L D G A L E A R H R E P R G
P V T S S T E P S S P G T G S P D A
P C P R P P R R R A R G P A A R T P

ACC CGT GCC AGC TCC TCC AGA GGC CGC TCG AGC CGG GCC ACG GCG AGC CCA GCC
37485 37494 37503 37512 37521 37530

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W A R S R R S P A S S A R C R S G R
G H G R G L R R A R P G A A R V G
G T V E E V S G E L G P V P L G S A

P D V A R A L V D G D D G G A L A H
R I W R V P S S T V T T A V P W H T
G S G G C P R P R * R R R W R G T R

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R I H R T G E D V T V V A T G Q C V

M D G Q G D R L G H R V L R R D L H
C T A R A T A S A M A S S A D I S T
A H R G P R R P P W P P R P T S R P

ACG TAC AGC GGG ACC GGC AGC GCC TCC GGT ACC GGC TGC TCC GCA GCT AGC TCC
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C M S P W P S R R P W R T R R R S R
A C R P G R R G G H G G R G V D R G
H V A L A V A E A M A D E A S I E V

H I R A R D V R H V P L R D P R R R
T S G R V I * G T S Q S V I R A D A
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ACC ACC TAG GCG CGT GCT AGA TGG GCC ACC TGA CCC TCT GCT AGG CCC GCA GCC
37647 37656 37665 37674 37683 37692

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W W I R A R S T R W T G R R S G R R
G G S A H D L P G G L G D D P G V G
V D P R T I Y P V D W E T I R A S A

L L G S P Q D D I V G V P H A P E
 S F V P R S T T M S S A L R I H P N
 P S S R V A P R * R H R W G S T R T

 GCC TCT TCT GGC CTG CCG ACC AGC AGT AGC TAC TGC GGT TGG CCT ACA CGC CCA
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 G E D R T A G R H R * R Q P D V R V
 E K T G R L V V I D D A N R M C G F

 A A L H Q G G R R L L E I Q R G P G
 P P S T S A V A A S C N S R V A R G
 R R R P A P W R P P A T R D S P G A

 AGC CGC CGC TCC ACG ACC GGT GGC GCC GCC TCG TCA AGC TAG ACT GCC GGG CCG
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 S A A R C W P P R R S S S I * R P G
 R R R G A G H R G G A V R S D G P A
 G G E V L A T A A E Q F D L T A R P

 P P H G P R V A R D D G V R E H E V
 R R T V R G S P A T M G * A S T S S
 G A P S G A P R R P * G R R A R A R

 GGG CCG CCC ACT GGG CCG GCC TGC CGC GCC AGT AGG GGA TGC GCG AGC ACG AGC
 37809 37818 37827 37836 37845 37854
 CCC GGC GGG TGA CCC GGC CGG ACG GCG CGG TCA TCC CCT ACG CGC TCG TGC TCG

 P G G * P G R T A R S S P T R S C S
 P A G D P A G R R G H P L R A R A R
 R R V T R P D G A V I P Y A L V L D

 L R Q Q R V R G L Q G V R D T G D Q
 W A N S G S A A W S V S A I R A T R
 G P T A A P R P G A S R R S G H R G

 TGG TCC GCA ACG ACG GCC TGC GCC GGG TCG ACT GGC TGC GCT AGG CAC GGC AGG
 37863 37872 37881 37890 37899 37908
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 T R R C C R T R P S * P T R S V P S
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 Q A L L P D A A Q L T D A I R A V L

 L S A A R R P G S E F P L S S S N R
 F H R P V V L G Q S S R S L L H I G
 S T V R C S S A R V R V P S F I F E

 ACT TCA CTG CGC CGT GCT GCT CCG GGA CTG AGC TTG CCC TCT CTT CTA CTT AAG
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 TGA AGT GAC GCG GCA CGA CGA GGC CCT GAC TCG AAC GGG AGA GAA GAT GAA TTC

* S D A A R R G P D S N G R E D E F
 E V T R H D E A L T R T G E K (M) N S
 K * R G T T R P * L E R E R R * I P GT
 A D A A P R S S * R R S W R A T S A
 L T P R P D H R D G D P G V L Q A P
 S R R G R T T V I V T P V L S S H Q

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 E R R P R V V T I T V G T N E L C W
 S V G R G S * R S P S G P T S C A G
 P G T D R S R A P C R C W R S R G P
 Q V P T E A G Q Q V A V G G A E V Q
 S S R H R P E K S S L S V V P K S R

 CGA CCT GGC CAC AGA GCC GAG GAA CGA CCT GTC GCT GTG GTG GCC GAA GCT GGA
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 GCT GGA CCG GTG TCT CGG CTC CTT GCT GGA CAG CGA CAC CAC CGG CTT CGA CCT

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 L D R C L G S L L D S D T T G F D L
 W T G V S A P C W T A T P P A S T W
 P R S R R C R S P P R C H R A H A R
 L D A V D V V V R R V A T D L M H A
 S T Q * T S L S E A S P L T S C T R

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 E V C Y V D N D S A D G S V E H V R
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 S R A R P S S * G C R G C D P S R R
 R G P G R H R D D A V V A I Q A E G
 A V Q G A T V I M R L S R L R P K A

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 R P G P R * R S S A T T A I W A S P
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 GCC CCG CTT GTT GCA GCC GTA GGC GGC GCG GGA CCT CAG GCC GCG CCT GAT GCA

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 G A N N V G I R R A L E S G A D Y V
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 G R * G R C R S A A R G P A R V * R
 E E D V G V G P R R G V Q H A S E G
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 F Q G L F P R L V A D D A R Q L V A
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 V V G V G R R E V L E V L P R V R G
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 L W L G E Q H A F A G D G I A H P S
 C G W A S S T P S P A T G S P I P P
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 P N P A R R G S R S A A R S R A A R
 L T R R E E G P G R H Q A L D P Q E
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S S S G R * R R R S A G P S P R G A
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 A T T T S S P T S T G T R R R P P G

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 E G P A P E H R V E H A A A D D A A A
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 R P P R P A A F P A D Q H P R Q L H

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S R R A R G E G G V L M R P L K V
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 S T L M G S R T G P L S A Q I E T G
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 A G Q H P A A G P G E R C L D L R T
 G C P Y P P M W H T T A L R I S P S
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 A G T R P R G L P A G C P G Q P G R
 R G P S V T T G A P S G S S I S R H
 V G P A S R R A P P R A P P S R A T
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 T P G A D R R A G G R A G G D R A V
 S R V A S T S T T W S W L P P T M P
 A A S R P R R R P G R G C R R H * R
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GT4

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 G A P S G G P V A K M L E C W K V V
 G P R A A A P C R R * * S A G S * W
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 A R P G C R R A P P S S A R T T S P
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 R G T L G T P Q V * L E R A C R A W
 G A P * G R P S Y R C N G P A A R G
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 G L G G H A A S G D H A R A V A A Q

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 S I T G E T P S T T P Y P V S K A G
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 G L D H G R D A F D H S V A G V E R

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 V P Q A A G R S D L E V R G R G P E

P H V A R A E A R R * D K D L W P R
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 R V D R P G L G T S S V L V Q P G A

P E P D A V E E A A G M F V L V Y A
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 A A R P R R G R R G G G H L G A C L

GCG CCG AGC CCC AGC CGC TGG AGA AGC CGG CGG GGG TAC TTC TGG TCG TGT ATC
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R R T Q D T L N P G A Y H P A R L A
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 G P A D P R H S Q P G R L A S R A P

CGG GCC GCG CAG ACC AGC CAC TCT AAC CCC GGG CGC ATT ACG CCT CGC GCG TCC
 40131 40140 40149 40158 40167 40176
 GCC CGG CGC GTC TGG TCG GTG AGA TTG GGG CCC GCG TAA TGC GGA GCG CGC AGG

A R R V W S V R L G P A * C G A R R
 P G A S G R * D W G P R N A E R A G
 P A R L V G E I G A R V M R S A Q G

H V V A E G S A L P V P V G A A P D
 T C W P R V R P S P S P C G P P R T
 R A G R G * G L R P P R A G R R G P

CGC ACG TGG TGC CGG AGT GGG CTC CGC TCC CCC TGC CCG TGG GGC CGC CGG CCC
 40185 40194 40203 40212 40221 40230
 GCG TGC ACC ACG GCC TCA CCC GAG GCG AGG GGG ACG GGC ACC CCG GCG GCC GGG

A C T T A S P E A R G T G T P A A G
 R A P R P H P R R G G R A P R R P G
 V H H G L T R G E G D G H P G G R V

V A D T V L G R I R D D D I H R H
 W R T P * W G G S V T T T T S T G T
 G G R R D G A G P Y P R R R R H A P

AGG TGG CGC AGC CAG TGG TCG GGG GCC TAT GCC AGC AGC AGC AGC TAC ACG GCC

40239	40248	40257	40266	40275	40284
TCC ACC GCG TCG GTC ACC AGC CCC CGG ATA CGG TCG TCG TCG ATG TGC CGG					
<pre> S T A S V T S P R I R S S S S M C R P P R R S P A P G Y G R R R R C A G H R V G H Q P P D T V V V V D V P V </pre>					
<pre> P L V P G L H A G P V Y H L C G S D R C C P V S T R A P C M T C A A A T A A A R S R P A R R A C L A P L R Q </pre>					
<pre> ACG CCG TCG TGC CCT GGC TCC ACG CGC GGC CCG TGT ATC ACG TCC GTC GGC GAC 40293 40302 40311 40320 40329 40338 TGC GGC AGC ACG GGA CCG AGG TGC GCG CCG GGC ACA TAG TGC AGG CAG CCG CTG </pre>					
<pre> C G S T G P R C A P G T * C R Q P L A A A R D R G A R R A H S A G S R C R Q H G T E V R A G H I V Q A A A V </pre>					
<pre> V T A E D L P T W I S L G R R R C R W P P R T W R P G Y A S G A G A A A G R H G R G A P D M H Q A R A P P L </pre>					
<pre> AGG TGC CAC CGG AGC AGG TCG CCC CAG GTA TAC GAC TCG GGC GCG GCC GGC GTC 40347 40356 40365 40374 40383 40392 TCC ACG GTG GCC TCG TCC AGC GGG GTC CAT ATG CTG AGC CCG CGC CGG CGG CAG </pre>					
<pre> S T V A S S S G V H M L S P R R R Q P R W P R P A G S I C * A R A G G S H G G L V Q R G P Y A E P A P A A A </pre>					
<pre> P D M Y G E D Q H W P T A A G Y N P R T W T A R T R T G P R Q R A T T R A P G H L G R G P A L A N G R R L E </pre>					
<pre> GCG CCC AGG TAC ATC GGG AGC AGG ACC ACG GTC CCG CAA CGG CGC GGC ATC AAG 40401 40410 40419 40428 40437 40446 CGC GGG TCC ATG TAG CCC TCG TCC TGG TGC CAG GGC GTT GCC GCG CCG TAG TTC </pre>					
<pre> R G S M * P S S W C Q G V A A P * F A G P C S P R P G A R A L P R R S S R V H V A L V L V P G R C R A V V R </pre>					
<pre> P K L I A H G Y F D L E D E P I D L R S * F P T G M S T S S T R R S T W A A E S H R A W L L R A R G G P H G </pre>					
<pre> CCG CCG AAG TCT TAC CGC ACG GGT ATC TTC AGC TCG AGC AGG AGG CCC TAC AGG 40455 40464 40473 40482 40491 40500 GGC GGC TTC AGA ATG GCG TGC CCA TAG AAG TCG AGC TCG TCC TCC GGG ATG TCC </pre>					
<pre> G G F R M A C P * K S S S S G M S A A S E W R A H R S R A R P P G C P R L Q N G V P I E V E L V L R D V Q </pre>					
<pre> L Q A A I A R C R Q F H A S E V L E C S R P S R G A G S S I R V R S W S </pre>					

A A A R R D G P V A P F A C E R G A

TCG TCG ACG CGC CGC TAG CGG GCC GTG GCG ACC TTT ACG CGT GAG AGC TGG TCG
40509 40518 40527 40536 40545 40554
AGC AGC TGC GCG GCG ATC GCC CGG CAC CGC TGG AAA TGC GCA CTC TCG ACC AGC

S S C A A I A R H R W K C A L S T S
A A A R R S P G T A G N A H S R P A
Q L R G D R P A P L E M R T L D Q L

P V F K E P R V I Q P L R A P R D S
P S S N R R A C S R R Y G P R G T P
R P R I E G P A R D A T A P G A Q R

AGC CCC TGC TTA AAG AGG CCC GCG TGC TAG ACG CCA TCG GCC CGG CCG GAC AGC
40563 40572 40581 40590 40599 40608
TCG GGG ACG AAT TTC TCC GGG CGC ACG ATC TGC GGT AGC CGG GCC GGC CTG TCG

S G T N F S G R T I C G S R A G L S
R G R I S P G A R S A V A G P A C R
G D E F L R A H D L R * P G R P V G

D Q R G A I D F Y D G T T F D A H E
I R A A P S T S T T A R L S T P T S
F G P P R R H R L L R G Y H L R R A

CTT AGG ACC GCC GGC CGC TAC AGC TTC ATC AGC GGG CAT CAC TTC AGC CGC ACG
40617 40626 40635 40644 40653 40662
GAA TCC TGG CGG CCG GCG ATG TCG AAG TAG TCG CCC GTA GTG AAG TCG GCG TGC

E S W R P A M S K * S P V V K S A C
N P G G R R C R S S R P * * S R R A
I L A A G D V E V V A R S E V G V L

S F L R D Y V G R L W E L E T D D V
P S C A I T S V A C G S W S R T T W
R L V P S R L C R A A V G A G H R G

AGC CTC TTG TCC GCT AGC ATC TGT GGC GCG TCG GTG AGG TCG AGG CAC AGC AGG
40671 40680 40689 40698 40707 40716
TCG GAG AAC AGG CGA TCG TAG ACA CCG CGC AGC CAC TCC AGC TCC GTG TCG TCC

S E N R R S * T P R S H S S S V S S
R R T G D R R H R A A T P A P C R P
G E Q A I V D T A Q P L Q L R V V H

L R P L S A F G D A Q F A A R H E E
S G R C R H S D T P R S P Q A T S R
R A A A A I R I R R G P L S R P A G

TGC TCG GCG CCG TCG CTA CGC TTA GGC AGC CGG ACC TTC CGA CGC GCC ACG AGG
40725 40734 40743 40752 40761 40770
ACG AGC CGC GGC AGC GAT GCG AAT CCG TCG GCC TGG AAG GCT GCG CGG TGC TCC

T S R G S D A N P S A W K A A R C S
R A A A A M R I R R P G R L R G A P
E P R Q R C E S V G L E G C A V L L

D I V T E V A G M R R S R E D P M Q
 T S * L K W P G W V A A G K T L C K
 R R D C N G R G G Y P P E K R * A N

 AGC AGC TAG TGT CAA AGG TGC CGG GGG TAT GCC GCC GAG GAA AGC AGT CCG TAA
 40779 40788 40797 40806 40815 40824
 TCG TCG ATC ACA GTT TCC ACG GCC CCC ATA CGG CGG CTC CTT TCG TCA GGC ATT

 S S I T V S T A P I R R L L S S G I
 R R S Q F P R P P Y G G S F R Q A F
 V D H S F H G P H T A A P F V R H L

 P S R Y T G G R F I A D A K A P S Y
 L H V I R E E G S Y P M P K L R L I
 S T F S V N R G P I H C R S * G S F

 ACT CCA CTT GCT ATG CAA GGA GGG GCC TTA TAC CGT AGC CGA AAT CGG CCT CTT
 40833 40842 40851 40860 40869 40878
 TGA GGT GAA CGA TAC GTT CCT CCC CGG AAT ATG GCA TCG GCT TTA GCC GGA GAA

 * G E R Y V P P R N M A S A L A G E
 E V N D T F L P G I W H R L * P E N
 R * T I R S S P E Y G I G F S R R I

 H I S * V R A P L P S D M A T P R R
 T F Q S S E Q R Y R H I W P R R A A
 L S N V L S K G T A T F G H G D P P

 ATC ACT TAA CTG ATC TGA GAA CGG CCA TCG CCA CTT AGG TAC CGG CAG CCC GCC
 40887 40896 40905 40914 40923 40932
 TAG TGA ATT GAC TAG ACT CTT GCC GGT AGC GGT GAA TCC ATG GCC GTC GGG CGG

 * * I D * T L A G S G E S M A V G R
 S E L T R L L P V A V N P W P S G G
 V N * L D S C R * R * I H G R R A A

 E W Q H A H L V R P A V Y T F Y P L
 S G N I R T Y Y E R R S T H L I R S
 A G M S A R T I S E A R R I Y F V P

 GCG AGG GTA ACT ACG CGC ACA TTA TGA GAG CCG CGC TGC ATA CAT TTT ATG CCC
 40941 40950 40959 40968 40977 40986
 CGC TCC CAT TGA TGC GCG TGT AAT ACT CTC GGC GCG ACG TAT GTA AAA TAC GGG

 R S H * C A C N T L G A T Y V K Y G
 A P I D A R V I L S A R R M * N T G
 L P L M R V * Y S R R D V C K I R E

 P N S H S S V T R N R Q I D S A D D
 R T A I V P C L A I A N S T P P T M
 A P Q * S Q V C H S Q T P H R L R *

 TCG CCC AAC GAT ACT GAC CTG TGT CAC GCT AAC GCA ACC TAC AGC CTC CGC AGT
 40995 41004 41013 41022 41031 41040
 AGC GGG TTG CTA TGA CTG GAC ACA GTG CGA TTG CGT TGG ATG TCG GAG GCG TCA

S G E L * L D T V R L R W M S E A S
 A G C Y D W T Q C D C V G C R R R H
 R V A M T G H S A I A L D V G G V I

P

V V V L R E F Q S P K L P G E V K R
 * * S S G K S S A Q S * P V K S R A
 R S R R A K R V P K A E P S R R G Q

 AGA TGA TGC TGC TCG GAA AGC TTG ACC GAA CCG AAG TCC CCT GGA AGC TGG AAC
 41049 41058 41067 41076 41085 41094

TCT ACT ACG ACG AGC CTT TCG AAC TGG CTT GGC TTC AGG GGA CCT TCG ACC TTG

S T T T S L S N W L G F R G P S T L
 L L R R A F R T G L A S G D L R P C
 Y Y D E P F E L A W L Q G T F D L A

D G S I R T N G E A I E D L V G L T
 T V A S G L T V R R S K M S S V S R
 P * R Q D S H * G G R N * R P C R A

 GCC AGT GGC GAC TAG GCT CAC AAT GGG AGG CGC TAA AGT AGC TCC TGT GGC TCG
 41103 41112 41121 41130 41139 41148

CGG TCA CCG CTG ATC CGA GTG TTA CCC TCC GCG ATT TCA TCG AGG ACA CCG AGC

R S P L I R V L P S A I S S R T P S
 G H R * S E C Y P P R F H R G H R A
 V T A D P S V T L R D F I E D T E R

E I Q V P F R R R L S R A N E R R C
 K * R S P F V G A S R G P M R E E A
 N R D P R S F A P P A V P C E R K P

 CAA AGA TAG ACC TGC CCT TTT GCG GCC GCC TCG CTG GCC CGT AAG AGA GAA GCC
 41157 41166 41175 41184 41193 41202

GTT TCT ATC TGG ACG GGA AAA CGC CGG CGG AGC GAC CGG GCA TTC TCT CTT CGG

V S I W T G K R R R S D R A F S L R
 F L S G R E N A G G A T G H S L F G
 F Y L D G K T P A E R P G I L S S A

R G V L A P D P N S P G P P F Q G L
 A A S S L Q T R T R R A Q R S S A W
 L P R R S S P G P E V P R A P V P G

 GTC GCC GGC TGC TCT CGA CCC AGG CCC AAG CTG CCC GGA CCG CCC TTG ACC GGG
 41211 41220 41229 41238 41247 41256

CAG CGG CCG ACG AGA GCT GGG TCC GGG TTC GAC GGG CCT GGC GGG AAC TGG CCC

Q R P T R A G S G F D G P G N W P
 S G R R E L G P G S T G L A G T G P
 A A D E S W V R V R R A W R E L A Q

L N R T R N R R D R G E G A F H R R
 S I G P E I A A T V A R A R S I G V
 P S E Q N S Q P P * P G R G R F A S

 TCC TCT AAG GAC CAA GCT AAC GCC GCC AGT GCC GGG AGC GGG CGC CGC TTT ACG GCT

41265 41274 41283 41292 41301 41310
 AGG AGA TTC CTG GTT CGA TTG CGG CGG TCA CGG CCC TCG CCC GCG AAA TGC CGA
 R R F L V R L R R S R P S P A K C R
 G D S W F D C G G H G P R P R N A D
 E I P G S I A A V T A L A R E M P T
 R H D R I L R G L A G V Y E R F P P
 V T T A F * G G S H A S T S A S H P
 S P P R S D A A R T R R R V R P I P
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 CGA CGG TGG TCG CGA ATC AGC CGC CCG AGT GCG CCG ACG TAC TCG CGG AAT GGG
 R R W S R I S R P S A P T Y S R N G
 D G G R E S A A R V R R R T R G M G
 T V V A N Q P P E C A D V L A E W G
 Q G G D Q L R H D E V A E F P D G L
 S V A T R S V T T R S Q K S P T A L
 A S R R G P S P G R S S R L P R W
 CCG ACT GGC GGC AGG ACC TCT GCC ACC AGG AGC TGA CGA AGC TTC CCC AGC GGT
 41373 41382 41391 41400 41409 41418
 GGC TGA CCG CCG TCC TGG AGA CGG TGG TCC TCG ACT GCT TCG AAG GGG TCG CCA
 G * P P S W R R W S S T A S K G S P
 A D R R P G D G G P R L L R R G R Q
 L T A V L E T V V L D C F E G V A K
 G I G P Q Q A D G Q G P E A P G G A
 G S G R S S P M A R A R S P R G G P
 A R D G A A P C R G P G A R G A G R
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 S P I P G C W A S P W P G S A G P P
 A R S P A A G H R P G P A R P A P R
 P D P R L L G I A L A R L G R P P G
 L Q Q H H A V A D V V V H C G G T G
 S S S T T P L R T S W S T A G A R E
 R A A P P C G R R G R R P V R G N
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 41481 41490 41499 41508 41517 41526
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 E L L V V G N R V D H D V A P A R S
 Q A A R R H E Y Q R L V A V A P W R
 R P Q G A T N T S G S S P * R L G G

G P S G P P T R V A P P R S G C A V
 GGG ACC CGA CGG GCC GCC ACA AGC ATG ACG GCC TCC TGC CGA TGG CGT CCG GTG
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 CCC TGG GCT GCC CGG CGG TGT TCG TAC TGC CGG AGG ACG GCT ACC GCA GGC CAC

 P W A A R R C S Y C R R T A T A G H
 P G L P G G V R T A G G R L P Q A T
 L G C P A V F V L P E D G Y R R P P

 A D M R V E G P G V A G Q A R D T G
 P T W G S R V R A * R A R R A T R V
 P R G D P G * G P R G R G A R P G Y

 GCC CGC AGG TAG GCC TGG AGT GGG CCC GGA TGG CGC GGG ACG CGC GCC AGG CAT
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 G R P S G P H P G L P R P A R G P Y
 G V H P D L T R A Y R A L R A V R T

 H R R P V V H R P D G G E G V Q G R
 T G G P S S T G R T A E R A S R A A
 R A E P P R R A A P R R G R R G P R

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 R A S G G R R A A G R L P R R P G R
 V P P G D D V P R V A S L A D L A A

 R G Q R A E T R Q S W P P G A A R P
 D G R A R R P A S H G R R V Q Q G P
 T A G P A G R H A T V V A S R S G P

 GCA GCG GGG ACC GCG CGG AGC CAC GCG ACA CTG GTG CCG CCT GGA CGA CGG GCC
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 V A P G A P R C A V T T A D L L P G
 S P L A R L G A L * P R R T C C P G

 G Y P P S R P S P N * R I G A S P W
 V T R R H D P R R T E D S G P Q R G
 S R V A T I P A V P K M P D R S V A

 CCT GGC ATG CCG CCA CTA GCC CCG CTG CCC AAA GTA GCC TAG GGC CGA CTG CCG
 41751 41760 41769 41778 41787 41796
 GGA CCG TAC GGC GGT GAT CGG GGC GAC GGG TTT CAT CGG ATC CCG GCT GAC GGC

 G P Y G G D R G D G F H R I P A D G
 D R T A V I G A T G F I G S R L T A
 T V R R * S G R R V S S D P G * R P

Q3

A * R Q R G A R A P R R * G P T G A
 P E G S V A R A R R G G E V P R E R
 L S V A S P G R A G A A K L R A N G

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 CAG GCT CAC CGC TGA CGG CCC GCG CGC GCC GGC CGC CTT CAA CCG GGC GTT CCC

 Q A H R * R P A R A G R L Q P G V P
 R L T A D G P R A P A A F N R A F P
 G S P L T A R A R R P P S T G R S R

 P P R R G P R G P V P P P R C R R S
 R H D A A P G G R S Q R L G V D D V
 G T T P P R A A G P S A S A S M T *

 CGG CCA CCA GCC GGC CCG GCG GGG CCC TGA CCG CCT CCG GCT GTA GCA GAT
 41859 41868 41877 41886 41895 41904
 GCC GGT GGT CGG CGG CCC CGC CCC GGG ACT GGC GGA GGC CGA CAT CGT CTA

 A G G R R P G R P G T G G G R H R L
 P V V G G R A A P G L A E A D I V Y
 R W S A A G P P R D W R R P T S S T

 G P R R G * D P G R R V D A R G P R
 E Q G G A E T R D E G F T P G V Q D
 K R A A P R L G T R A S R R G S R T

 GAA GGA CCG GCG GCC GGA GTC AGG CCA GGA GCG GCT TGC AGC CGG GCT GGA CCA
 41913 41922 41931 41940 41949 41958
 CTT CCT GGC CGC CGG CCT CAG TCC GGT CCT CGC CGA ACG TCG GCC CGA CCT GGT

 L P G R R P Q S G P R R T S A R P G
 F L A A G L S P V L A E R R P D L V
 S W P P A S V R S S P N V G P T W S

 P R V G V A P R P A P P A T W L P V
 L G F A S Q Q D L H Q L R Q G S R S
 S A S R R S S T S T S S A S D L A P

 GCT CCG GCT TGC GGC TGA CGA CCA GCT CCA CGA CCT CCG CGA CAG GTC TCG CCC
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 CGA GGC CGA ACG CCG ACT GCT GGT CGA GGT GCT GGA GGC GCT GTC CAG AGC GGG

 R G R T P T A G R G A G A V Q S G
 E A E R R L L V E V L E A L S R A G
 R P N A D C W S R C W R R C P E R D

 G G P T R V P W S P R P P R R A R P
 V A R H E Y Q G A R A P R D V R G L
 C R G T N T S A L E P P A T * A G S

 TGT GGC GGG CCA CAA GCA TGA CCG GTC GAG CCC GCC CCG CCA GAT GCG CGG GCT
 42021 42030 42039 42048 42057 42066
 ACA CCG CCC GGT GTT CGT ACT GGC CAG CTC GGG CGG GGC GGT CTA CGC GCC CGA

T P P G V R T G Q L G R G G L R A R
 H R P V F V L A S S G G A V Y A P E
 T A R C S Y W P A R A G R S T R P R
 R V A T G P S W G S G A R S R R R A
 D F R R V P L G A R G P G V G D V P
 T S G G Y R S V L G V R G S E T * P

 CCA GCT TGG CGG CAT GGC CCT CTG GTC GGG CTG GGC CGG GCT GAG GCA GAT GCC
 42075 42084 42093 42102 42111 42120
 GGT CGA ACC GCC GTA CCG GGA GAC CAG CCC GAC CCG GCC CGA CTC CGT CTA CGG

 G R T A V P G D Q P D P A R L R L R
 V E P P Y R E T S P T R P D S V Y G
 S N R R T G R P A R P G P T P S T G
 R W A G G R V R A T G A S P H R G H
 V G L E A E F A L Q A P V R I G D T
 C A L S R R S R S S H R C E S A T R

 CGT GCG GTT CGA GGC GGA GCT TGC GCT CGA CAC GGC CGT GAG CCT ACG GCA GGC
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 GCA CGC CAA GCT CCG CCT CGA ACG CGA GCT GTG CCG GCA CTC GGA TGC CGT CCG

 A R Q A P P R T R A V P A L G C R P
 H A K L R L E R E L C R H S D A V R
 T P S S A S N A S C A G T R M P S V
 R P R A T S C H R R D R G A R G A R
 G H D R P Q A I D V T G A L A G Q A
 A T T A R N L L T * P G P W R A R R

 ACG GCA CCA GCG CGC CAA CTC GTT ACA GAT GCC AGG GGC GGT CGC GCG GGA CGC
 42183 42192 42201 42210 42219 42228
 TGC CGT GGT CGC GCG GTT GAG CAA TGT CTA CGG TCC CGG CCA GCG CGC CCT GCG

 C R G R A V E Q C L R S R P A R P A
 A V V A R L S N V Y G P G Q R A L R
 P W S R G * A M S T V P A S A P C A
 T R H A A A S A S P P R G P R A R A
 P E T H Q R V P Q R R G G P A L G H
 P N P T S G C Q S V A A A R P S G T

 GCC CAA GCC ACA CGA CGG CGT GAC CGA CTG CCG CCG GCG GGC CCC GCT CGG GCA
 42237 42246 42255 42264 42273 42282
 CGG GTT CGG TGT GCT GCC GCA CTG GCT GAC GGC GGC CGC CCG GGG CGA GCC CGT

 R V R C A A A L A D G G R P G R A R
 G F G V L P H W L T A A A R G E P V
 G S V C C R T G * R R P P G A S P C
 P T R R D A H P G P S H G R R R R *
 P H E A I R M H D P V I D V D V V D
 R T N P S G C T T R S * T W T S S T

 CGC CCA CAA GCC GCT AGG CGT ACA CCA GGC CCT GAT ACA GGT GCA GCT GCT GCA

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 A G V R R S A C G P G L C P R R R R
 R V F G D P H V V R D Y V H V D D V
 G C S A I R M W S G T M S T S T T S
 G T G A R A A R G P R R R G A A R R
 G P E Q E R Q A A P D A A A P Q G G
 V R N R S A S R P R T P P P R S G A

 GTG GGC CAA GGA CGA GCG CGA CGC GCC GGC CCA GCC GCC GGC CGA CGG GCG
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 T R F L L A L R G R V G G G R L P A
 P G S C S R C A A G S A A A G C P P
 P S R R S P R A W K A S R G A P S R
 H H V D A R A H G S R Q A A Q Q L D
 T T F T P E P T G V E S L P R S S I

 GCA CCA CTT GCA GCC GAG CCC GCA CGG GTG AAG CGA CTC GCC GGA CGA CCT CTA
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 R G E R R L G R A H F A E R P A G D
 V V N V G S G V P T S L S G L L E I
 W * T S A R A C P L R * A A C W R S
 T R H S R R S R R P A S P A P V T R
 H G T H G A A G D R H A P L P S P G
 T D P T V P P E T A T R Q S R P R D

 GCA CAG GCC ACA CTG GCC GCC GAG GCA GCG CCA CGC GAC CCT CGC CCC TGC CAG
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 R V R C D R R L R R G A L G A G T V
 V S G V T G G S V A V R W E R G R S
 C P V * P A A P S R C A G S G D G P
 R G A P C S A P H R V P G R R V R S
 E V P L A V P Q I D C P G A G F E V
 K S R C P L Q S S T A R A R A S S S

 GAA GCT GGC CGT CCC GTT GAC CGA CCT ACA GCG TGC CCG GGC GCG GCT TGA GCT
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 F D R Q G N W L D V A R A P R A E L D
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 A P R W G G S R P H G A T S P A H A
 P P G G D G Q G L T D P L A P L T H H

Q R A A M G R V S P T R C H Q S R T
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 CTG GCG GGC CGC CAT CCC CCT GAC CGA GGG TGT CCG GCA GTG CTG GGA GCG TGT
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 W R A A I P L T E G V R Q C W E R V
 G G P P S P * P R V S G S A G S V C
 G R R R G P G K R R S A S S P * V R
 E V V G A P G R G G R R A L R D S A
 S W S A P R A G E A E V R * V T L R
 CGA GGT GCT GCG GCC GGC CCG GGG AAG GCG GAG CTG CGC GAT CTG CCA GTC TGC
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 GCT CCA CGA CGC CGG CCG GGC CCC TTC CGC CTC GAC GCG CTA GAC GGT CAG ACG
 A P R R R P G P F R L D A L D G Q T
 L H D A G R A P S A S T R * T V R R
 S T T P A G P L P P R R A R R S D A
 * V T L R T L R M R P R L S A P S W
 N S P * V R * V C G R V S R H R A G
 T L R D S A D S A D A S P A I G P E
 GCA ATC TGC CAG TCT GCG CAG TCT GCG TAG GCG CCT GCC TCG CTA CGG CCC GAG
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 L D G Q T R Q T H P R T E R C R A P
 G R V W R T T F G P M L A T I L A Q
 G E Y G G L P S A R C * R Q S * P R
 V R T G V S H H L G A D V S H D P G
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 T L V P T E W * S P A S T L * S G P
 P S Y P P S G E A R H Q R C D Q G L
 V P R N G A D P Q D G P L S G H R P
 S R G I G L T P S T V L Y L G T A P
 P G A S E W R R A P * W T S V R P P
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 G P A D S Q R R A G H Q V E T R P G G
 D R P I P S V G L V T R * R P V A G

R L P R P R G D Q R S G R Q G T R R
 D Y L D H A D M K G P A E S V P A A
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 S * R S W A S I L P G A S L T G A A

 A D R G G G D F P R E R G G R A V P
 P M G A A A M L R A N E A A A A L L Q
 P C G P R R W * V P T R P R R S C S

 GCC CGT AGG GCC GGC GGC GGT AGT TTG CCC GCA AGA GCC GGC GGC GCT CGT TGA
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 G H P G R R H Q T G V L G R R E Q L
 G I P A A A I K R A F S A A A S N W

 P R L Q G G A P R R G P R A G A P R
 R V S N D E P L A D A Q A H A Q Q A
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 CCG CCT GCC TCA ACA GGA GGC CGT CCC GCA GCC GGA CCC GCA CGC GGA CGA CCC
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 A D G V V L R Q G V G L G V R L L G
 R T E L S S G R A S A W A C A C W A

 P G R A H R H R R P H R G T G R G
 R D E H T G T V A D H I D A L G A V
 A T R T R A P S P T T S T P W D R S

 GCG CCA GGA GCA CGC ACG GCC ACT GCC GCA CCT ACA GCC GGT CAG GGC GCT
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 A V L V R A G D G V V D V G Q S R D
 R S S C V P V T A S W M S A S P A T

 T R R L G G R R R G A R V R G H R A
 L E A F A V A G D V Q E Y E A T A R
 W N P S P W R A T S R S T S P R P A

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 Q F G E G H R A V D L L V L G R G A
 S S A K A T A P S T C S Y S A V A R

 G P D D R R G A R L L R G Q R G T A
 E P T M A D A L E F Y A A K G A Q Q
 S R P * R T P W S S T P P R A P R N

 CGA GGC CCC AGT AGC GCA GCC GGT CGA GCT TCA TCC GCC GGA ACG GCC GGA CAA
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 L R G H R V G Q L E V G G L A G L L
 S G V I A S A S S K * A A L P A C C

 P V R R V G P H V A A P L R Q P L A
 Q Y V G S V L T F L R Q Y A N R Y L
 S T C A P C W P S C G S T P T A T S

 CGA CCA TGT GCG GCC TGT GGT CCC ACT TGT CGG CGA CCA TCC GCA ACG CCA TCT
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 L V H A G H Q G E Q P L V G V A V E
 W Y T P D T R V N S R W * A L R * S

 V R L V G R G G G H R G Q E G H R
 S E Y F A G A E E E T V D K N V T A
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 A T R R T P R P P P * R P C S P W
 R L V E R P G L L L R D V L V H R G
 D S * N A P A S S S V T S L F T V A

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 L V S T A A L M G S Y L A L H V G T
 S C P R R P W C A A T S R W T S A P

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 E H G R R G Q H A A V E R Q V D A G
 S T D V A A S M P L * S A R W T P V

 V A A P R P L L R R R R P L L R P
 S L L P D L F C A A D G A L Y Y G P
 P C C R T S S A P P T A P S T T A P

 ACC TGT CGT CGC CCA GCT CCT TCG TCC GCC GCA GCG GCC GCT CCA TCA TCG GCC

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 G Q Q R V E E A G G V A G E V V A G
 D S S G S R K Q A A S P A R * * P G

 R P L Q R R R L L G A G G T R G A
 G H F S D A V Y S F D Q E V R V G P
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 CCG GCA CCT TCG ACA GCC GCT GCA TCC TCT TCA GGA CGA GGT GGG CAT GCG GGC
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 Q Y V G N A M L D R V T P S E E V L
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 S A L M A E L D A H E R R R E L F R
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 G P P L R F R R Q V P G R A A P D G
 D Q H C V F G V S Y R D G R L P I V
 T R T A S S V S A T G T G A C R S *

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 L V L R G P R Q H R Q H G R H A F Q
 W Y W G D P A S I V N I G G T P S S

G T G A T R P A S S T S A G Q P R V
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 P L L S G G Q W Y G W I A V N R F I
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 G S S E P P C Q * P Q I A T L R K I
 R A P P P E E P A Q L H R R G P G L
 E H P R R N K L H K S I V G A R G S
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 S C G R R F F R C L E M T P A R P E
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 V G E T V D A G Q K V A N K L L V H
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 ACT GCG GGA GCC ACT GCA GCC GCG GGA CGA ACT GGC GCA AGA AGT CCT CGT GCA
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 * R P R * R R R P A * P R S S G A R
 D A L G D V G A L L D R V L Q E H V
 T P S V T S A P C L T A F F R S T W

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 D F D D R D V Q W S R V D P G F I K
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 A L R D G L G G Q G L A A A R R E Q
 P W D I A W D E K G W R L L V G N K
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 G H L R P L R G G G A R R P R H H
 V T Y G R S D V E E L A G V L D I I
 S R T V A P T S R R W R A S S T S S

 ACT GGC ACA TTG GCG CCC TCA GCT GGA GGA GGT CGC GCG GCT GCT CCA GCT ACT
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 * P C N R G S R P P P A R R R G R *
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 T V * P R E S T S S S A P T R S M M

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V R H E E A I D S P M W * R G K V S

T G I A E R V H R G Q Q A L L G G H
R E L L K V S M G A K S L L S A A T
G N W Y S * P C A P R A S C P P R R

GGG CAA GGT TAT CGA AGT GCC TGT ACG GCC GGA ACG ACT CGT TCC TCC GGC GGC
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CCC GTT CCA ATA GCT TCA CGG ACA TGC CGG CCT TGC TGA GCA AGG AGG CCG CCG

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P F Q * L H G H A G L A E Q G G R R
R S N S F T D M P A L L S K E A A V

I G G A W R R D R A S K Q V H L E G
S G A P G G G I V L V K K S M S S G
P D R R G V A S * S C K K P C P A G

ACC TAG GGC GGC CGG GTG GCG GCT AGT GCT CGT GAA AAA ACC TGT ACC TCG AGG
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D P A G P P P I T S T F L D M E L P
S I I * T E R R P A N R I S I F M R
V S L E P K V D R R R M A S L F S C G
W Q Y N L N * T A A C Q P Y F H V D

GGT GAC TAT TAA GTC CAA AGT GCA GCG CCG CGT AAC GCC TAT CTT TAC TTG TAG
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CCA CTG ATA ATT CAG GTT TCA CGT CGC GGC GCA TTG CGG ATA GAA ATG AAC ATC

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H * * F R F H V A A H C G * K * T S
T D N S G F T S R R T A D R N E H P

C P Y N H F V E G L T T A V S * H F
A R T I T F Y K E S H L R S A R T S
P V P L Q S I S R R T Y D R R E L P

GCC GTG CCC ATT AAC ACT TTA TGA AGA GGC TCA CAT CAG CGC TGC GAG ATC ACC
44289 44298 44307 44316 44325 44334

CGG CAC GGG TAA TTG TGA AAT ACT TCT CCG AGT GTA GTC GCG ACG CTC TAG TGG

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A R V I V K Y F S E C S R D A L V E

R * D K K M R S * T A D A E P N T G
D R T R R * A R S H L M R K P I L A
I E L G E E H A V I Y C G S R S * H

TTA GAG ATC AGG AAG AAG TAC GCG CTG ATA CAT CGT AGG CGA AGC CCT AAT CAC

44343 44352 44361 44370 44379 44388
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 N L * S F F M R D Y V A S A S G L V
 I S S P S S C A T M * H P L R D * C
 S L V L L H A R L C S I R F G I S A
 L E A V T R Y L L T I P V R T S V S
 S S R S R G T F S R S P F G R V S R
 R A G R G D Q L P A H H S G A Y Q G

 GGC TCG AGG CGC TGG CAG GAC ATT TCC TCG CAC TAC CCT TGG GCG CAT GAC TGG
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 A C K L A E D G V A E D V Q R T R E
 P A S S L K T E S P K M W K G P A N
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 CTC CGC GTG AAC TCT CGA AGC AGA GGC TGC CGA AGT AGG TGA ACG GCC CAC GCA
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 G A L E S F V S D G F I H L P G A F
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 P G R R G P W R S A P L P G A P P A

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V V P R P G A A A P A P V L G H R R

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64

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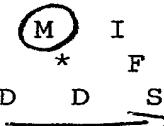
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 S R L G D D S V * A S A H Y G N H W

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 S E W C A G R A G R M P A T V G P C
 R N G A R A G P A V C P R R S A P A
 G S M R T T L P S K S S W V L R I A
 G P C G L P S R R S A P G S S G S R

V R V D S W H H A A A V Q Q V L L R A Q D
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 T R T S E W * A A A T C W T R R A * S
 P G H P S G E R R L A G P D E P D R
 A T S C D Q G V S I * L R P A R D N
 Q Q R A T R G W R S R C G R R G T T
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 L L S S S P A P P R S T T S A P C R
 C C R A V L P H R D L Q P R R P V V
 T G T E Q F C G V T A A S T V P L P
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 E D R D G P L L G G N G R L H G A L
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 R P G L L E A A H R C R G G D R Q G
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 H A A S A P P W G C * P P A * C N G
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 C A A D A G G H P H H G G A Q Q F P
 V V L L P T G R K * * A E V E S I N
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 R F P A P T G A S R P W A R G G A C
 E S L H P L G R L A L G R G E V R A

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 G * P T A L A N P C * M T C F * R S
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 V V R D V R G Q R D P V Q P R V T D

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 G P G P T R * A C P T A R P P R R S
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S W A * W T S S G W A T W R R N A T
A G P D G Q A P A G Q P G G G T R L

P K A P S * T R P M V I I S A W S S
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G L R R G L R A R H D D D A R P G R

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A P P G R G R C R S * G G P A R D P
L R L V E D E A G P D G V P H A I Q

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L P A A A P G G G T A L R R P E P

A R C F S P Q F G S T E N S S T A
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A S P L L E A P L G L D R E L F Q D

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 M I T S L S R R R S V S L S S A A P
 W S P R C R G A G A * R C H P R R R
 G H H D V A V Q A Q E G V T L V G G

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 A M M V D S D L R L L T D S E D A A
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 H D G R Q R P A P A H R Q * G R R R
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 P H R P R R Q G L Q P S P P E V G V
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 C P F G R A R T R L R R R R P G A

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 A E H L G L D L G A V V V A D L Q R
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 P G H Q G A E R R I R E G G G P R H
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 V G S C I V W S S P R C K L M M P T
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 P Q G R G V V A F V I K V I E G V A
 V Q E D V G P E L G A Q Q V A H L H
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 G P T V Q C V P E N Y P Q G P P R F
 E V V D Q G S G R L A E E V T G D Q
 R S * T R V A E G S R R R * L A T R

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 G L L A P A E V V R L V A I E Q D L
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 A E E G G R F Y H S Q N S Y L L V E
 G V V V E G Y G D G I V V A P H G G
 A S S S K G T A T G S S * Q Q T V A
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 A D D D F P V A V P D D Y C W V T A
 V L E G P E Q P V A V V D V D L G P
 W W S V R S R R C P * * T L T S A R
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 L R S A Q R C L Q H G W S S R A D R
 S G A R R G A S N T V G H L V L T G
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 G A C S P A C R V G D P (M) K N E R P
 E P A R L P A E L V T P * R T S V P
 S L L A C L Q S W * P H E E R A S R

R S P M R P Q E S M A R R R V R G A
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 H P Q A N E A A G V D G S A T G Q R

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 S F G S V A R * G S V T V A T R R A
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23

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 G P P R R S N S S L A W R A A R L A
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F A R S Q V A G S W V D G H G E L H
 L R G L S S R V V G C T G T G R L T
 W V G S V P G C W E V R G R A G * P

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 K R P R L D R T T P H V P V P L K V
 * R R G A A R R R T R G C W R V G A
 D G G G P P V G G R V G A G A S A Q
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 S P P P G G T P P R T P A P A D A C
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 R G G P A V G P R V P E A L A R T G
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 V P R * G A S A S * R P T A R R W S
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 T M G T A R S D S R V S P L S R R P
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 G H P G G P A V G P H R G Q A A P G
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 G L R R P A S G S * P P R D P W R A
 V * G G L P L A V E H H D T R G A H

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 I L Q V R S V S F R L T S R T V G S
 S * S S G P S R S A C H A A R S V A
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 D Q L D P G D R E A Q C A A R D T A

 C P G S R C S A N A S Q F P R P P T
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 A R P R P A G R V R R L E G A G R R

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 S R S P P S T R C G A S R R P G A A
 R G H H L R R A A G L P G A R G R R
 T P M S T T S S A W * T F F G R V R
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 G G H A R R G R G P L R E E S P D P
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 G S W P R R R T P P A S R G R A T G
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 L A N R L A T A G T * R R R L W C S
 W P T G C P P R V P R D A G C G A P
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 C A P R R R P S G R R A A A * A S R
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 E L A T S M * R G G S P R A P E E V
 S L H P A * K D G V L R D L L S K S

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 CGG CAT GTT CTC GAC CCC GGC AGC CAA CGT GCC CTT CGT GTC GAG GAG TTC GTC

 R H V L D P G S Q R A L R V E E F V
 G M F S T P A A N V P F V S R S S S
 A C S R P R Q P T C P S C R G V R P

 R R P S N S C C P G G G R N S R R S
 A G P R T R A A P A A E G T R D V R
 L A Q A L E L L P R R G Q E I S A

 GTC GCG GAC CCG CTC AAG CTC GTC CCC GGC GGA GGG GAC AAG CTA GCT GCG
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 CAG CGC CTG GGC GAG TTC GAG CAG CAG GGG CCG CCT CCC CTG TTC GAT CGA CGC

Q R L G E F E Q Q G P P P L F D R R
 S A W A S S S S R G R L P C S I D A
 A P G R V R A A G A A S P V R S T R

P R R T P S S R K A W P V R R S A R
 H D G R R R P G S Q G P F E A H L G
 I T E E D A L V A K G L S S Q T F G

 CTA CCA GAG GAG CAG CCG CTC CTG GCG AAA CGG GTC CCT TGA GAC GCA CTT CGG
 55413 55422 55431 55440 55449 55458
 GAT GGT CTC CTC GTC GGC GAG GAC CGC TTT GCC CAG GGA ACT CTG CGT GAA GCC

D G L L V G E D R F A Q G T L R E A
 M V S S S A R T A L P R E L C V K P
 W S P R R G P L C P G N S A * S P

R R A P P R C R S A W W G C P R C T
 G G Q P R G A D A Q G G D A H D V P
 A A K R A A Q M Q K G V M R M T S L

 GCG GCG GAA CGC CCG CCG GAC GTA GAC GAA CGG GTG GTA GGC GTA CCA GCT GTC
 55467 55476 55485 55494 55503 55512
 CGC CGC CTT GCG GGC GGC CTG CAT CTG CTT GCC CAC CAT CCG CAT GGT CGA CAG

R R L A G G L H L L A H H P H G R Q
 A A L R A A C I C L P T I R M V D R
 P P C G R P A S A C P P S A W S T G

R R G R C S R P T * A P R V G W V C
 E E E A A A E Q L E H Q G L E G C A
 N K K R P L K K S N M S A * S G V R

XAS

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 GTT CTT CTT CCG CGG CAG CTT GGA GTT CAT GCT GGC CTA ACT CCC CAC ACG

V L L P R Q L L G V H A G L T P H T
 F F F R G S F L E F M L A * L P T R
 S S S A A A S W S S C W P N S P H A

G Y P G P T S G Y L I R T R T C A S
 G M L V R H R G T C F G L V P A R V
 V W L S G T D V R V F D S Y P H V C

 GTG GGT ATT CCT GGG CCA CAG CTG GGC ATG TTT TAG GCT CAT GCC CAC GTG CGT
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 CAC CCA TAA GGA CCC GGT GTC GAC CCG TAC AAA ATC CGA GTA CGG GTG CAC GCA

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 T H K D P V S T R T K S E Y G C T H
 P I R T R C R P V Q N P S T G A R T
 I F A L * A A R C E D R S R R L R V
 S L L W D R Q A V N T G H V V C V F
 Q Y F G I V S R S M R G T F S A F S

GAC TAT TTT CGG TTA GTG CGA CGC GCT GTA AGC AGG GCA CTT GCT GCG TTT GCT

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 * * K P I T L R D I R P V N D A N E
 D K S Q S R C A T F V P * T T Q T N

 G G G A R G T R R V C G G I W G R Q
 E G V L A V L E V C A V A S G D G S
 S G W W R S W N * A R L R R D M G A

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 ACT CCC CCA CCA GCG CGA CCA GTT CTA CGC ACG CAA CCG CCG ATC CAT CCC CGC

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 L P H Q R D Q F Y A R N R R S I P A
 S P T S A T S S T H A T A D P S P L

 G C S S R R T V * T S P G R R S P G
 G A V Q G G P * E L V P A E G V P V
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 A R N L T S W S L K Y W G L S D W D
 P A T * P P G H S S T G A S P T G T

 P R R R V G R R S R T P S W R G G G
 P G V V Y E E A H A L Q R G V G E E
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 G P T T Y S S A * A S W R P T P S S

 R R G A R G H N G E E R G S H R R R
 V A D R G A M T E K K A D A I V A V
 W P T G G P W P K R R R T R * S P S

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 T A S R P A M V S F F A S A M T A T
 G G R R P G R C R F P R V G F G R R
 D E A D L D V V A S R A Y G S G G V

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 G R R L R G R D A G P R R A P R C T
 V G V F A A A T Q E Q D A R Q G V L
 S G S S P P R P R S R T P A S A S L
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 P A H A L S R G A F D D P G L E G H
 H P T P S R V G P L T T Q A S N A T
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 W G V G E R T P G K V V W A E F A V
 G A W A S E R P A K S S G P S S P C
 P G K H L E Q P P R L R E A S A C S
 L A R T C N R H L G * D K P Q R V P
 C P G Q A I G T S A E I K R S V C L
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 Q G P C A I P V E A S I F R L T H R
 R A L V Q F L W R P Q S F G * R T G
 L C L S N V H G Q G S R R T A G V L
 S A C H T S M G R G V G G R R G W L
 L P V T L Q C A G A W E A A D G G C
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 GAG AGG CAC AGT GAG TTG ACA TGC CCC TGC CCA CTC CGC CGC GTC GCC CCC ACA
 E R H S E L T C P C P L R R V A P T
 R G T V S * H A P A H S A A S P P Q
 E A Q * V D M P L P T P P R R P H K

A G G I S S G E S P L S A D Y G A
 R V V S Q P P G R L H C H H T M G P
 A C W R N L L V G * I A T I R * V R

 TCG CGT GGT GGC TAA CTC CTC CTG GGG AGT CTA CCG TCA CTA CGC AGT ATG GGC
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 AGC GCA CCA CCG ATT GAG GAG GAC CCC TCA GAT GGC AGT GAT GCG TCA TAC CCG

 S A P P I E E D P S D G S D A S Y P
 A H H R L R R T P Q M A V M R H T R
 R T T D * G G P L R W Q * C V I P G

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F V P R G * R S P W R P G R R S G R
 S S Q G G E A H R G G R G E G R A E
 R L S A A R L T V A V A A R A A L R

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 R R L A A L S V T A T A A L A A S L
 E D W P P S A * R P P R P S P R A S

R R E G R W P R G R P G Y G T R P R
 D G S E G G R G G G L A T D L V R A
 T E A R G A V A A G S P R I W Y A P

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P L R R P R C S C R S G * P P G R G
 R C V G H G V A V D H V E L R V V G
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 R Q T P W P T A T S * T S R R T T P

N P N R P R V R G R R S T R R R C R
 T R T G L G S A G E D L L V A G V D
 R E P E S A P R A R T S F Y P A S M

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 R S G S E A G R A L V E K Y G A D I
 V R V P R P D A P S S R S T A P T S

A C T C S P G S R S R S R P R R P P
 L A R V L L G Q V A V R D L G G L R
 S R V Y L F A R F P * A I S A E S A

GCT CGC GTG CAT GTT CTT CCG GGA CTT GCC GAT GCG CTA GCT CCG GAG GCT CCG
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R A H V Q E G P E R L R D R G L R G
 E R T Y K K A L N G Y A I E A S E A
 S A R T R R P * T A T R S R P P R R

P W P A R R R G P P R R R P G S G C
 L G L R E G G V R R D G G H D L V A
 S A L A S A A S G A T A E T T W F R

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G G Q G A R R R P G G R L R G P E P
 E A K A L A A D P A V A S V V Q N R
 R P R R S P P T R R S P P W S R T A

T * C R R S G S W G A R R P G P G R
 H E A D V R G L G V R G G P A Q V A
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 M F S I D A T Q T N P P S W G L D R
 C S A S T R P R P T R P P G A W T A

P G S S G G G S C S T C R G P S P R
 H V L L V E G Q V A R V G V R V R G
 T S W F F R G R F L E Y V * G S E A

GCA CCT GGT CTT CTT GGA GGG GGA CTT GTC GAG CAT GTG GAT GGG CCT GAG CCG
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R G P E E P P P E Q L V H L P G L G
 V D Q K N L P L N S S Y T Y P D S A
 W T R R T S P * T A R T P T R T R P

A P L S P T R * R C R R G C * G C R
 P L S H R R V D D V G A D A D G V A
 P C P T V A Y T M S V P T R M V W L

GCC CGT CCC TCA CTG CCG CAT GCA GTA GCT GTG GCC GCA GGC GTA GTG GGT GTC

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G Q G V T A Y V I D T G V R I T H S
G R E * R R T S S T P A S A S P T A

S R R G P R R R S R R W R C R C C R
V E A A P G G V A V V G D V V V V G
S K P P R A E * P * S A M S L S L V

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D F G G R A S Y G Y D A I D N D N T
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G P R G R G R C A R P R C P R R C R
G L V A V A V A R V H G A R D G A V
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A Q D G H G H G T H V A G T V A G N
P R T A T A T A R T W P A R S P A T

R R R R W S P W S R L R G R A S C S
G V A D G L L G L D Y A D A H Q V V V
A * P T A L F A L I T P T R T S F L

GCG GAT GCC GCA GCG GTT CTT CCG GTT CTA GCA TCC GCA GGC GCA CGA CTT GTT
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A Y G V A K K A K I V G V R V L N N
P T A S P R R P R S * A S A C * T T

R G P C W R G P R R R C R S P R G S
G A L A G G G L D D G A D V P D G P
E P W P V V A W T T A P M S Q T A R

GAG GCC GGT CCC GTG GTG GCG GGT CCA GCA GCG GCC GTA GCT GAC CCA GCG GGC
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CTC CGG CCA GGG CAC CAC CGC CCA GGT CGT CGC CGG CAT CGA CTG GGT CGC CCG

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S G Q G T T A Q V V A G I D W V A R
P A R A P P R S S P A S T G S P G
R R * A P R R W C T G R R R R R C P
V G D L R G D G V H G E A A A G V R

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 G R C P R V C R W P R R R R * R R R P
 G E V R G Y A V G H G G A D G E G H
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 P R C R T S W R R W S T V R V R * R
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 P W * P R R S S W S P R W P R S S W
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 R P S R S A R R P A R T P R P A T P

 S R S R G R G R R G R N T W * R P R
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 L * P E T R S R K A G P E D M V E A

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 T T A P S S T S S P P V R P S P R P

S S L R S P S W C W R R Y T S P S G
 P V * A V R R G V G D G T R R H R G
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 G T Q A T R R P T P S P V R R W R P

 A R P P R R R A G G R R W G R P W G
 R V H R A G G R E V E G G V G R G G
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 T G P R W P A S T R R W W R R R * W
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 G D W T A V A S V D A A V V P T T V

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 P S Q V A T A L T S A A T T G V V T
 R P R S P R R * R P P P P P A S S P

 G R C P S A W G A G T R R G A A R G
 V G A R A R G V P E Q V D A P P V V
 L G P V P E G L R S R Y T P R R C S

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 T P A R A R P T G S C T S A G G T T

 G E P G A S R S C R H S C S * R C S
 V R R A R A E L V G T V V R D A V V
 W G G P G R K S F V P S * V I L S L

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 T L R A R A S R T P V T T R S A T T
 W P R T G P S P R R R R R C R A R P
 G R D L G R H R D G A D G A V R G R
 E V T S D G T V T E P T E P L A G E

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 S T V E S P V T V S G V S G N A P S
 P R S S P R * R S P A S P A T R P R
 G R R L P G C R G C T C R R G G P G
 G E G Y L D V D D V R V D A V E L D
 A R A T S T W M T W V Y M P S R W T

 CCG GGA GCG GCA TCT CCA GGT GTA GCA GGT GTG CAT GTA GCC GCT GGA GGT CCA
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 G P R R R G P H R P H V H R R P P G
 A L A V E V H I V H T Y I G D L Q V
 P S P * R S T S S T R T S A T S R S
 A S R G R R C P T C A * T T R C R R
 L Q D G G V A R R V R E L R V A G A
 W S I A G S P V A Y V S L D Y P V P

 GGT CGA CTA GCG GGG GCT GCC GTG CCG CAT GTG CGA GTT CAG CAT GCC GTG GCC
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 CCA GCT GAT CGC CCC CGA CGG CAC GGC GTA CAC GCT CAA GTC GTA CGG CAC CGG

 P A D R P R R H G V H A Q V V V R H R
 Q L I A P D G T A Y T L K S Y G T G
 S * S P P T A R R T R S S R T A P A
 C N P C C * C W T S P S R R R P P P
 A T R V V D V G R V R H V G G R L R
 P L E S L M L V V Y E T F A E E S A

 GCC GTC AAG CCT GTT GTA GTT GTG GTG CAT GAG CCA CTT GCG GAG GAG CCT CCG
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 R Q F G Q H Q H H V L G E R L L G G
 G S S D N I N T T Y S V N A S S E A
 A V R T T S T P R T R * T P P R R R
 W R C T S V A P S R C R S S R C R A
 G V A R P F Q P H A V V R V V V G P
 A L P V H F S R T L S L A F * S V P

 CCG GTT GCC GTG CAC CTT TGA CGC CCA CTC GCT GTT GCG CTT GAT GCT GTG GCC

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 G Q R H V E T A G E R Q R E L R H R
 A N G T W K L R V S D N A N Y D T G
 P T A R G N C G * A T T R T T P G
 C L R R P A A T R A R G S W D * D D
 A Y V G P R Q L E L G G Q G T R T T
 R M S A Q A S C N * G E R V L G L R

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 P G P V G G G A L S D L G A P R P P
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 P A P A R R L R Q G S R G P L G G V
 R P R H A A S G K G V E A R W A G W
 Y P T G G G L G K S C P T D G A V C
 T R P A E G W A R R A P P T G L * A
 P V P H R G G L G E L L P H G W S R

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 G T G C L P P S P S S R G C P Q L R
 V R G A S P Q A L R A G G V P P S Y A
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 H Q A S P A R V G V P G C D R V A P

M S R R H P A Y G W P G A T A Y P P

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 M L R R W G A Y P H G P A V A Y G G
 C C A D G A R T P T G P Q S R T A G

 P S T D P P T R G C H G A D V R P V
 L P R T P P H G G A T V P T L V R C
 F P V H R P T D A R L S R R * C A A

 CTT CCC CTG CAC AGC CCC CCA CAG GCG GGC GTC ACT GGC CGC AGT TGT GCG CCG
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 K G T C R G V S A R S D R R Q H A A
 R G R V G G C P P A V T G V N T R H

 E Q G L P A A P G L V S V G R R P G
 R R A W P H R R D S S P C G G A R G
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 L L A Q G C R R S E D G H P P A R P

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 R G V V C G L A V R V G V W G G C A
 G V W L A V W P * A C G W G G G V P

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 R P T T Q P K A T R T P T H P P P Q A

 G C A H A R A G G G G R S * W R R P
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 A A G M R T R T P T T A G S P P S G

G W K T G G R G G S V M R G T T R W
 D G N R G A E G G A * W E G L R V G
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 V P A A R P C R P N Q E H G T R V H

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 V E A G R V G V A A L T G P A A G L
 Y R R G G S G L L R L P G R L L G L

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 T S A P R T P T A A R V P G A A P R

 C F A C P W Y G G D G Y G C P A G
 A S R A P G T G A V T A M G A R R V
 P L V R L A L V R W R R W V R V A C

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 G R T R R A S T R H R R H T R T A H
 A E R A G P V P A T V A I P A R R T

 P A G P G Y A Y W W G * P E W L G *
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 G P G R S R V R V V V G V A G V A G

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 P R G A G T L P T A M P A R T R P M
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 R Q K R G A T P S T S P S I A S A C
 G R S E A P R L A P A P V S R A P A
 D E A K Q R G Y P Q H Q S Q D R Q R

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 S S A F C R P * G W C W D * S R W R
 P L L S A G R R A G A G T D R A G A
 I L F R P S R P L P M A I A P E T S
 S * S A P R A L C P C P S L R N P A
 L D L L P A L S A L A H R Y G T R H

 GTC TAG TTC TTC GCC CCG CTC GCT CCG TTC CCG TAC CGC TAT CGG CCA AGC CAC
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 R R R R V R G T S P T A T W P S * R
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 L L R R T R P V D G V A V H G L H L
 S T T S P K L S A A L P S P V G * A
 R R R R R S * P R R S R R P C G R R
 G V D D V A E L V G R A A L A G G V

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 R A L P S Q K S E A V S V R S P A A
 G R W P R S S R S P S R C G P P R P
 G E G L A V A E V R R G V G Q L A R
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 GCC CTC GCC AAG GGC GAC TGC TTC GAC TCG GCG ACC GAC ACC CTG GAG GGC GCG
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 P S P R A T A S T R R P T P W R A R
 P R Q G R L L R L G D R H P G G R G
 * S T S S T G Q E A A C S P S T N A
 R R R P R P A R S R R A R R R P T R
 G V V H V L H G A G G R V V A L H E
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 P T T W T R C P A P P R T T A R C S
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 T T V R G P P A K G P S S S S V R V
 P R * G G R R R G P R R R V * G S
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 G R H P P R R R L P G R R R T H P D
 A S S L H * A S E A A V G H V G P G
 R R P C T N R A R R R * A M S V Q A
 G G L V L T V R E G G S R W P C R P
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 R R G Q V L R A L R R Y A M D T W A
 Y R V V R V D V V E D R G A L A P A
 T G S S A S T * * K M G V R W L Q R

R V P R R P R R S S * G S G G S S A

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 E A V A L D G A Q E A G R L V V A L
 K P S R S I V Q R N P A V C S S P L
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 Q G A * Q A A V R R C E V G V L D G
 S V P E S R L S G V V S S A S W T A
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 I R G G R P G R E Q G L G E G R P R
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H E A L L D L A A R V C S A S P R R
 T S P S C I S P Q A S V A P R L A G
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 V L G E Q I E G C A D T A G R R A P

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 A E P V A D L V E E M E D A R K D W
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 S P P P P W S R P C T S C T S R C R
 R L R R R G R V R V R V V R V V V V A
 A F A A A A V F A S V Y * V Y * S L

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 I R T R R R G R S R * R A C P E P G
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 R P R C R R R G * H T L P P T L A A
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 L S P P L P P R L T H A S T H A R

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 * L P S F T G A Y L G G C A C T M V
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 Y S G E K V P A * S P P H A Q V I T
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 D L S E R A K A Q V P C G L T A L S
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 H R V I L W P L L A R D N P G L P G
 I E * F S G L C L H G T T Q G C Q A
 S S D S L A F A C T G Q P R V A R L
 Q Q R Y L S I P A A L S K R H A A P
 N S D T C A S P L P W H S E T L L R
 T A T Q V L Q H S R G T V K P S C G

 ACA ACG ACA GAC ATG TTC GAC TAC CCT CGC CGG TCA CTG AAA GCC ACT CGT CGG
 59679 59688 59697 59706 59715 59724
 TGT TGC TGT CTG TAC AAG CTG ATG GGA GCG GCC AGT GAC TTT CGG TGA GCA GCC

 C C C L Y K L M G A A S D F R * A A
 V A V C T S * W E R P V T F G E Q P
 L L S V Q A D G S G Q * L S V S S R
 T G A R R P H D G C S S R * R N V A
 H V Q A D R T I E A L L D D V T * Q
 T Y R R T A P S R R L F I T L P E S

 CCA CAT GGA CGC GCA GCG CCC ACT AGA GGC GTT CTT CTA GCA GTT GCC AAG TGA

59733

59742

59751

59760

59769

59778

GGT GTA CCT GCG CGT CGC GGG TGA TCT CCG CAA GAA GAT CGT CAA CGG TTC ACT

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----- -----
G V P A R R G * S P Q E D R Q R F T
V Y L R V A G D L R K K I V N G S L
C T C A S R V I S A R R S S T V H C
----- -----

```

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V A C G G T G P W S G
W R V G A E R G L G P D
G G C V R R G D W A L I
----- -----

```

CGG TGG CGT GTG GGC GGA GGG CAG GGT CCG GTC CTA GG 5'

59787 59796 59805 59814

GCC ACC GCA CAC CCG CCT CCC GTC CCA GGC CAG GAT CC 3'

```

----- -----
A T A H P P P V P G Q D
P P H T R L P S Q A R I
H R T P A S R P R P G S
----- -----

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Figure 109

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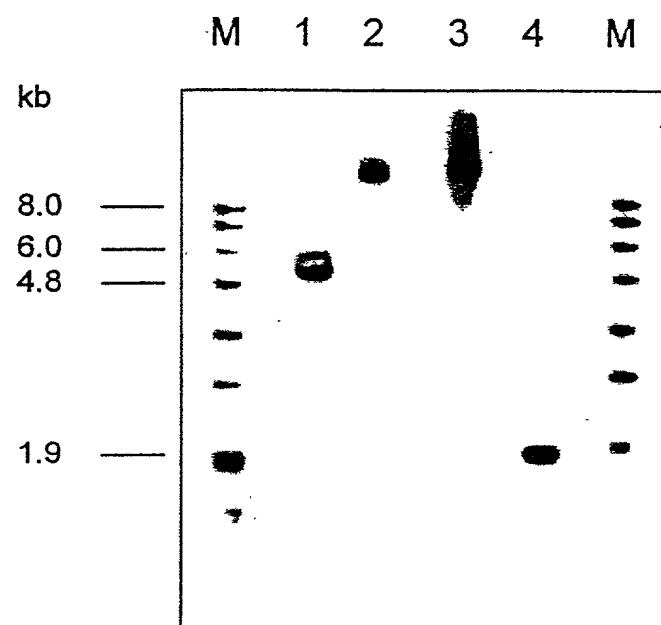
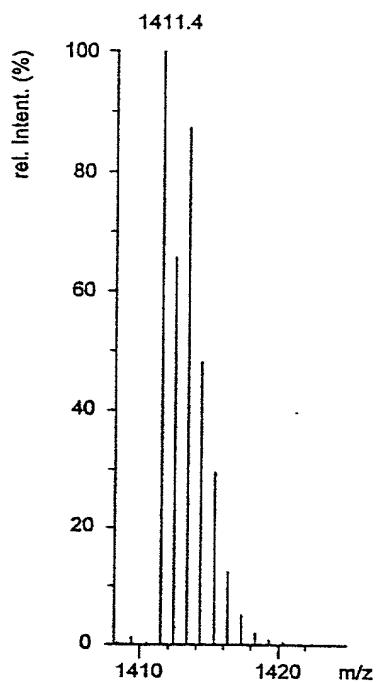


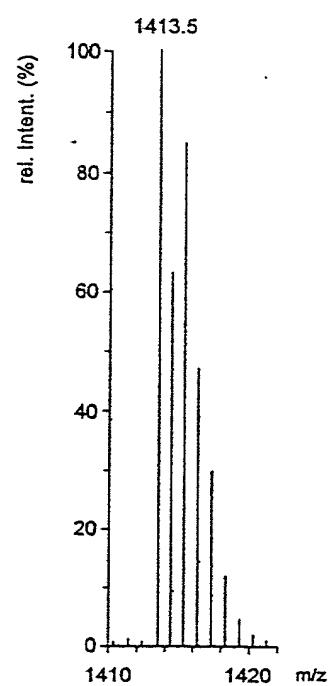
Figure 110

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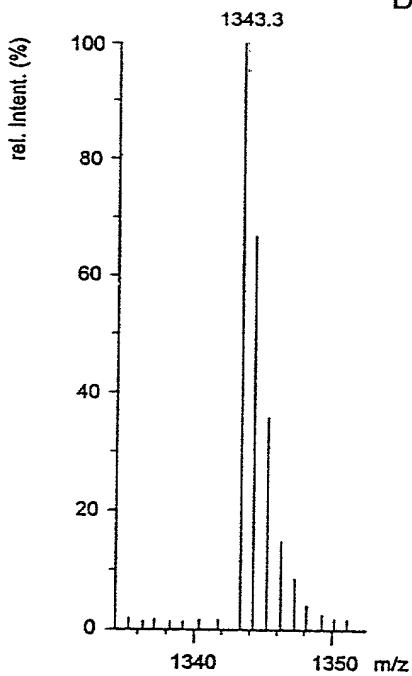
A



B



C



D

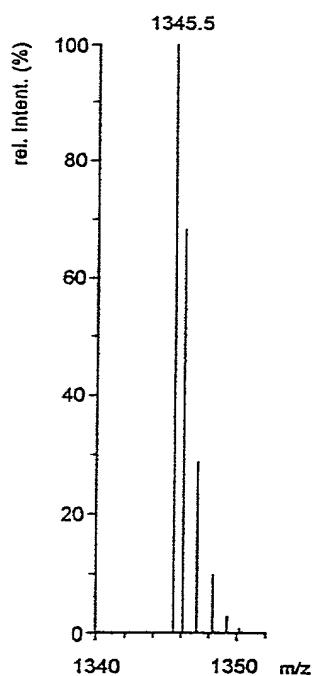


Figure 111

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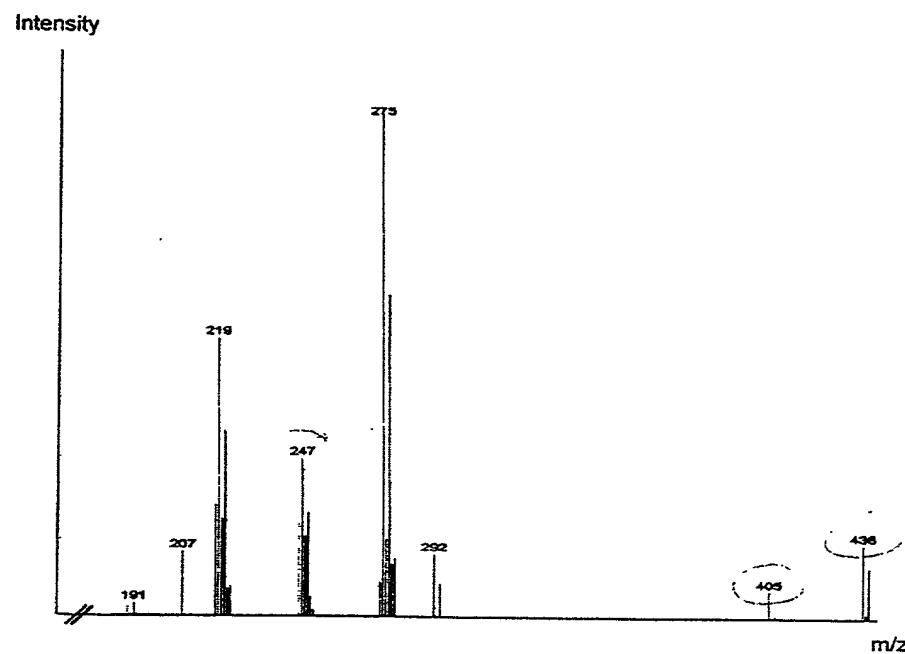
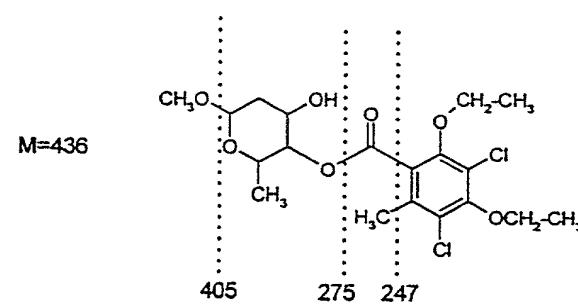


Figure 112